

VOL. V, NO. 4

MAY, 1909



\$1.00 A YEAR

SELLING ELECTRICITY

Edited by FRANK B. RAE, Jr.

**The Atlantic City
Convention may
show you YOUR
OPPORTUNITY.
Pack your grip in
time and GO!**

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ELECTRICAL HEATER CO.**
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SELLING ELECTRICITY is a monthly convention for the commercial man. It puts him in touch with the methods and experience of the "live wires," north, south, east and west, and *they tell their own stories.*

Subscribe now!

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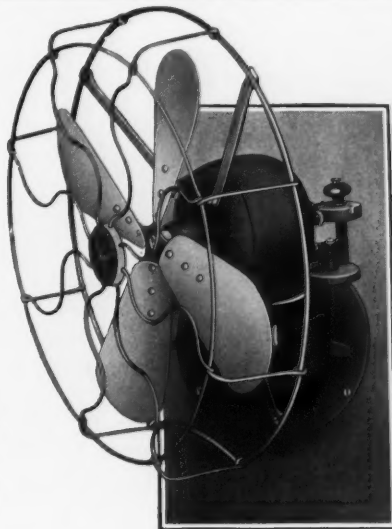
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No. 207

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Lake and Desplaines Streets, Chicago

In writing to advertisers, mention "Selling Electricity."

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MAY, 1909

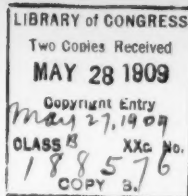
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ACT! An honest error of judgment costs less than procrastination, and fewer men are fired for making mistakes than are sacked for inefficiency.





SELLING ELECTRICITY

Vol. V

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The Commercial Men's Convention

THE Commercial Men of the central station industry have come into their own. The 32nd Annual Convention of the National Electric Light Association, Atlantic City, June 1, 2, 3 and 4, is a Commercial Men's Convention. The commercial program occupies four sessions and consists of 18 papers, all by experienced, able men whose reputations are founded upon their records in "delivering the goods" rather than upon conversational or literary ability. In this Convention, theory and opinion will give way to facts and the record of concrete results. The program:—

FIRST SESSION THURSDAY A. M.

1. *Methods of Introducing Tungsten Lamps and Their Effect on Central Station Income*—W. H. Atkins, Editor.
2. *Practical Illuminating Engineering in the Commercial Department*—G. A. Sawin, Editor.
3. *Cost of Obtaining New Business*—R. M. Searle, Editor.
Illustrated with Curves.
4. *Can a Display Room Be Conducted Upon a Profitable Basis?*—Frank B. Rae, Jr., Editor.
5. *Advantages to Be Derived from Uniform Commercial Department Forms and Methods*—C. N. Stannard, Editor.

SECOND SESSION THURSDAY P. M.

6. *Compilation of Load Factors*—E. W. Lloyd, Editor.
This paper to bring out the proper interpretation of the term "Load Factor."
7. *Power*—H. J. Gille, Editor.
8. *The Advantage of Group Drive in Certain Installations*—C. A. Graves, Editor.
9. *The New York High-Pressure Fire System*—
10. *The Development of Revenue from Existing Customers*—T. I. Jones, Editor.
11. *Adoption of Electrical Heat for Industrial Purposes*—Charles J. Russell, Editor.

THIRD SESSION FRIDAY A. M.

12. *Electricity for National Advertising*—George Williams.
Possibilities in Standardizing Bill-Board Lighting.
Illustrated.
Council of Progress.
Executive Session.

FOURTH SESSION FRIDAY P. M.

13. *Isolated Plants*—R. S. Orr, Editor.
Lighting.
Power.
Arguments Successfully Used.
Experience of Various Companies.
14. *Central Station Operation of Steam Plants in Connection with Lighting Company's Service*—S. Morgan Bushnell, Editor.
15. *Novel Methods of Advertising in Small Towns*—Alex J. Campbell, Editor.
16. *Electricity for Domestic Purposes*—M. E. Turner, Editor.
Installation.
Domestic Appliances.
17. *Effect of Various Conditions of Maintenance on the Efficiency of Illumination*—A. L. Eustice, Editor.
18. *Relation of Electric Vehicles to Central Station Business*—Hayden Eames, Editor.

The industry is to be congratulated upon having graduated commercially from the infant class. Half a dozen years ago, the monopolistic policies of boards of directors and the strict professional ethics of engineers made impossible any general commercial advance. When it was discovered that these policies led to popular antagonism and that ethics were a negligible factor in bringing desirable business on circuit, there came a determined change of front. Today, none but fossils and dyspeptics deny the Commercial Man a position of equality with the engineer, the lawyer and the financier.

It has been a long fight, in which the Commercial Men themselves have been largely to blame. Some of those who came in from other industries, failed to grasp the peculiar condition which makes absolute equality and co-ordination between the generating, distributing and sales departments an every second necessity in central station success. Being so cock-sure of their own ability and value, they failed to appreciate that equal ability and equal value lay in every other department of the station. And so, by condemning the bigotry of their directors and despising the conservatism of their engineers, they made a miserable failure of their own proper work. On the other hand, a large number of Commercial Men transferred from the ranks of the engineers or graduated from clerical training under the old regime, failed to develop the force, aggressiveness and breadth necessary to real success. Trepidation in the face of unjust clamor, secretiveness in dealing with the press, aloofness in meeting the people, unnatural and unnecessary dignity in advertising—these were their failings. The one class was guilty of wanton errors of commission; the other, of supine errors of omission. Between the two, we have scored a good many failures these past four or five years, but we have also scored successes. Some big policies worked out, big principles established. We have ceased to grope after kindergarten ideas. We no longer gasp and shudder at obvious

truths. We have made enough mistakes to realize that mistakes are not necessarily fatal and have now enough victories to accept them with reasonable equanimity as the logical result of well-conceived and carefully executed plans. In short, we have graduated, commercially, into long pants—have quit flying kites and playing mumbley-peg.

This year's National Electric Light Convention is a big step in advance. There is nothing obvious or elementary about the commercial program. Not a paper but touches a subject of vital, immediate interest to practically every central station in the land. Not a man has been chosen to prepare or discuss a paper who has not a substantial record of successful achievement behind him and a thorough first-hand knowledge of his subject. The Committee in charge, under Chairman Ingalls, has done good work. The member companies, actuated by a fraternal, get-together spirit equalled in few if any other industries, have given freely of time, money, energy and brains to insure the success of the Convention.

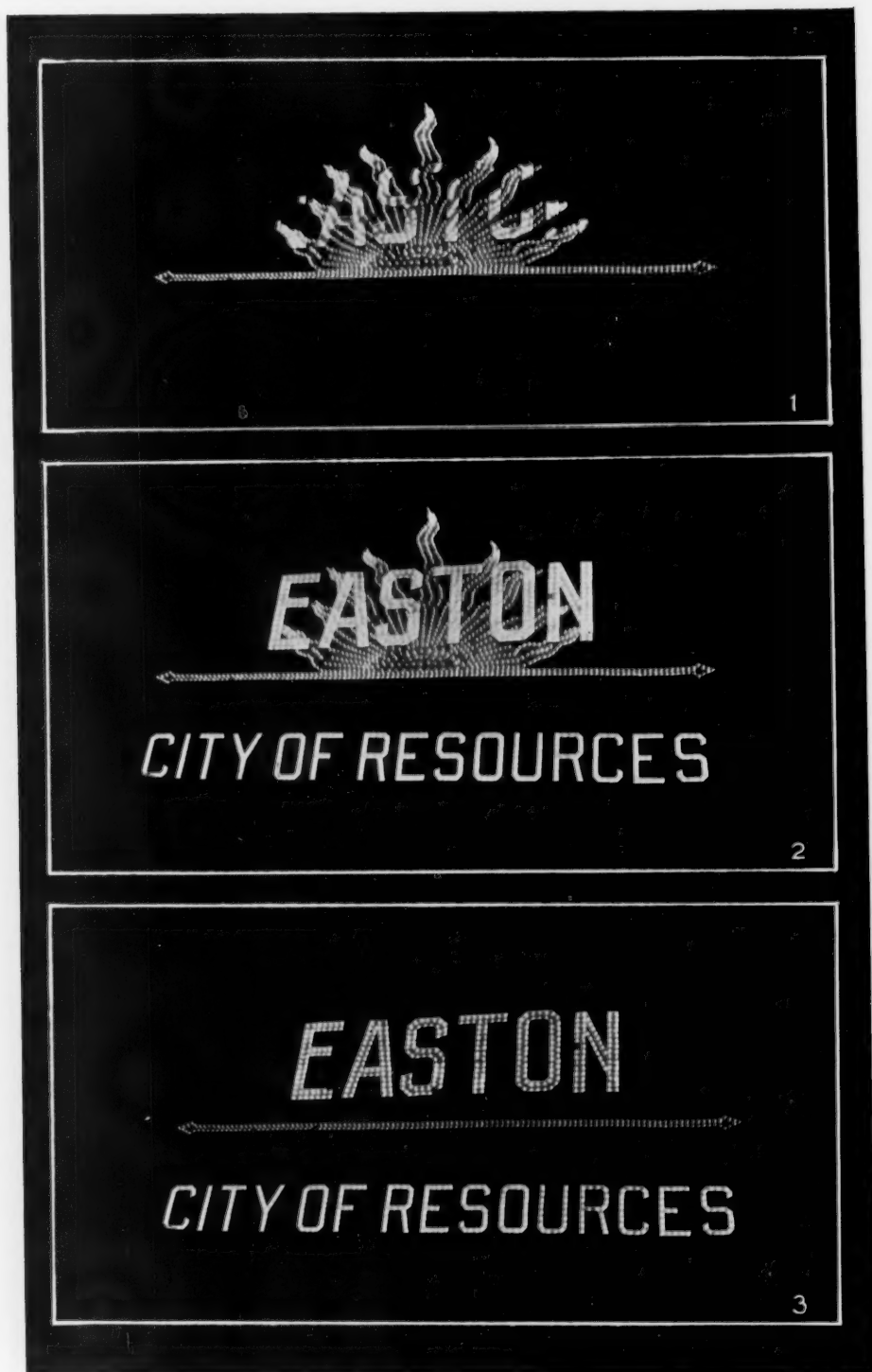
Those central station Commercial Men who come to Atlantic City will get many times their money's worth. Those who do not will lose a priceless opportunity to gain knowledge, experience and inspiration.

Marooned in the central stations of the smaller cities and towns are many hundreds of bright, capable men whose only points of contact with the leaders of the industry are through the trade press and the hit-and-miss gossip of traveling salesmen. Such men should not let slip this opportunity offered by the National Convention. The Association needs and welcomes them. And they are the very men who most need the National Association.

Come to THIS Convention. Butt right in and get acquainted. You will find the "welcome-to-our-city" smile on every face, and the glad hand of fellowship extended from every side. The "big fellows" will be just as pleased to meet you as you are to meet them. This is a Convention of "live wires" and any man whose voltage is normal will find himself taken in and, like Taft, made a 33rd degree member "at sight."

COME!





The Easton Slogan Sign

The arrows are bright green; the sun a deep red shading off in the rays to a pale pink; the letters are white. The sign measures 54 ft. by 45 ft. and contains 2,000 lamps. First the green arrows shoot out from the centre, then the red sun appears, and as the words come on the sun dies out leaving the sign as in (3).

The Awakening of Easton—City of Resources

The Story of a Slogan Sign Backed by a Central Station

BY EARL E. WHITEHORNE

ON Wednesday night April 21st as the eight o'clock train on the Lehigh Valley Railroad pulled into Easton, Pa., across the Delaware River bridge, the brakeman called out—"Easton! Everybody get on the right side of the car and see the big slogan sign. It's lighted up for the first time to-night."

The passengers crowded to the north windows and saw against the dark two green arrows shoot out from a centre till they formed a long, straight line pointing out the breadth of the city; then a red sun loomed up behind the green horizon line; then the red sun-rays shot up and writhed and flashed tongues of flame red in the sun itself and shading off to a pale pink. Suddenly over the blazing sun and in the midst of its rays the word "Easton" broke out in letters of white light ten feet high, and as the sun-rays faded and died away "City of Resources" flashed forth below in a line of five foot white letters. A moment later — darkness again. This display is repeated once every minute from dusk till midnight.

One of the passengers on this train met Mr. D. M. Coughlin, Contract Agent of the Easton Gas & Electric Co. as he came out of the station and said, "Say Denny, where in hell do you people get your public spirit? That sign is a wonder."

* * *

"That sign" is the evidence of a progressive co-operation between

the Easton Gas & Electric Co. and the Easton Board of Trade, a proof of the power of a central station to invigorate a community and an example of the virtue of broadmindedness.

Easton, Pa., is a city of 25,000 people, set in the hills at the junction of the Lehigh River and the Delaware and lying between them. Six

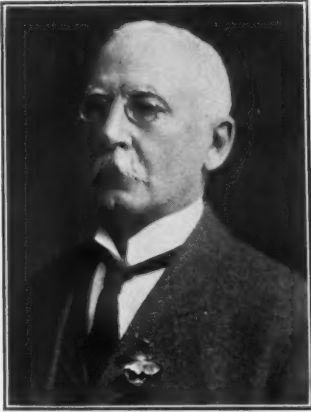
railroads cross on steel bridges and enter the town, the Lehigh canal passes through, and across the Delaware Bridge on the New Jersey side lies Phillipsburg, with 10,000 people who look to Easton for their market.

Back in the hills is the coal country and all about are slate and marble quarries. In the city itself are the Lehigh Valley Railroad shops, several big cement industries,



GEORGE WILLIAMS
The Man Behind the Slogan Sign

large silk mills, the Ingersoll-Rand pump and drill plant, foundries, hosiery mills and chemical works.



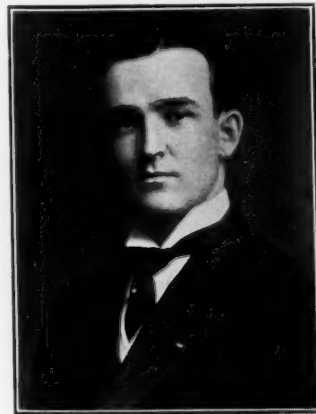
B. F. Cresson, General Manager
Easton Gas & Electric Co., Easton, Pa.

In short Easton, on a straight line from the coal mines to the seaboard, is ideally situated as an industrial centre and has already won a considerable reputation for prosperous activity. The city is rather over supplied with central stations, there being a municipal street lighting plant, the Peoples Light, Heat and Power Co., owned and operated by local merchants and business men and the Easton Gas & Electric Co. controlling the bulk of the business in Easton and serving Phillipsburg exclusively.

Last November, Henry L. Doherty & Co., of New York acquired the plant and business of the Easton Gas & Electric Co., and immediately plans were made for the commercial development of the property. Mr. B. F. Cresson, the former general manager, remaining in charge and entered into the spirit of the new regime with enthusiasm, Mr. D.

M. Coughlin, an old Doherty commercial man with a record in Denver, St. Joseph, Cincinnati and Canton, was installed to handle the campaign locally, and Mr. George Williams commercial genius of the Doherty companies, undertook personally to inoculate Easton with that same germ of enterprise and action that has broadened the reputation of Denver and Scranton. Experienced solicitors and power, sign and gas fuel specialists were brought in from other Doherty properties and liberal advertising was begun in the local press.

Easton heretofore had moved slowly, and conservatively and resisted the advance of time. Her wealth and her industries were on a large scale and for the most part owned by foreign corporations, so that the people of Easton themselves were inclined to complacency and not over progressive. It was



D. M. Coughlin, Contract Agent
Easton Gas & Electric Co., Easton, Pa.

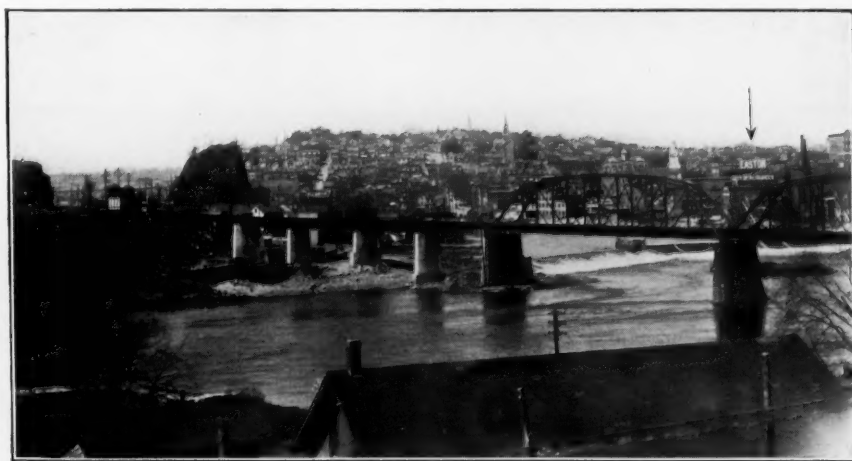
essential, therefore, in opening up this campaign to gather the representative citizens together, lay the

whole matter before them and enlist their co-operation and support.

Early in December the largest hall in the city was engaged for a public meeting and all the merchants and business men of the city were invited to be present. Nearly 400 attended, including the Mayor and members of both the Common and Select Councils who had adjourned meetings in order to be present. Mr. George Williams gave a lantern slide lecture on the subject of outdoor display lighting and

Sign Co. of Atlantic City gave a talk on the practical side, covering construction, costs, flashers, etc. Next Mr. F. L. Godinez, a consulting illuminating engineer took up the story of light control and the economic possibilities in modern scientific illumination. This was followed by a general discussion wherein the merchants present asked many questions.

At the close of the meeting, Mr. Williams told the people of Easton what Mr. Doherty's plan and pur-



View of Easton, Pa. from the Phillisburg Mills. The arrow indicates the location of the Slogan Sign. There are more railroad bridges to right and left of this photograph

electric advertising of all descriptions. One hundred and thirty views were shown of installations large and small, photographed in all the well lighted cities in the country. Mr. Williams talked on all sides of the subject, going into the matter of costs, consumption, efficiencies and advertising values and pointing out the features of the installations thrown on the screen. After Mr. Williams, Mr. Thomas E. Valentine of the Valentine Electric

pose was in coming into Easton and appealed to them for assistance. He also announced that the Easton Gas & Electric Co. would purchase and maintain at its own expense a mammoth electric sign to advertise the city of Easton to the traveling public. The value of a city slogan was explained, the records of other city slogans being cited, and a committee was appointed to receive suggestions and make a selection. This committee was composed of the

Live Signs Indicate Live Cities

We are doing OUR share to have Easton classed amongst the "LIVE ONES." Our immense "SLOGAN" Sign.

EASTON

"City of Resources"

which we have donated to the City will, for the first time, be turned on

Tonight—Look for the Rising Sun

located on our Storehouse at Second and Ferry—facing Phillipsburg and the railroad bridges.

Easton Gas and Electric Company

The Mammoth "Slogan" Sign

EASTON

City of Resources

With its rising sun effect, and double arrows—denoting progress, will be burning Easton's activity to the world, on Wednesday night, April 21st.

A crew of Electrical Experts are now rushing the work of construction.

The Easton Gas & Electric Co. is doing all this to help popularize Easton.

What are YOU going to do to help?

Easton Gas and Electric Company

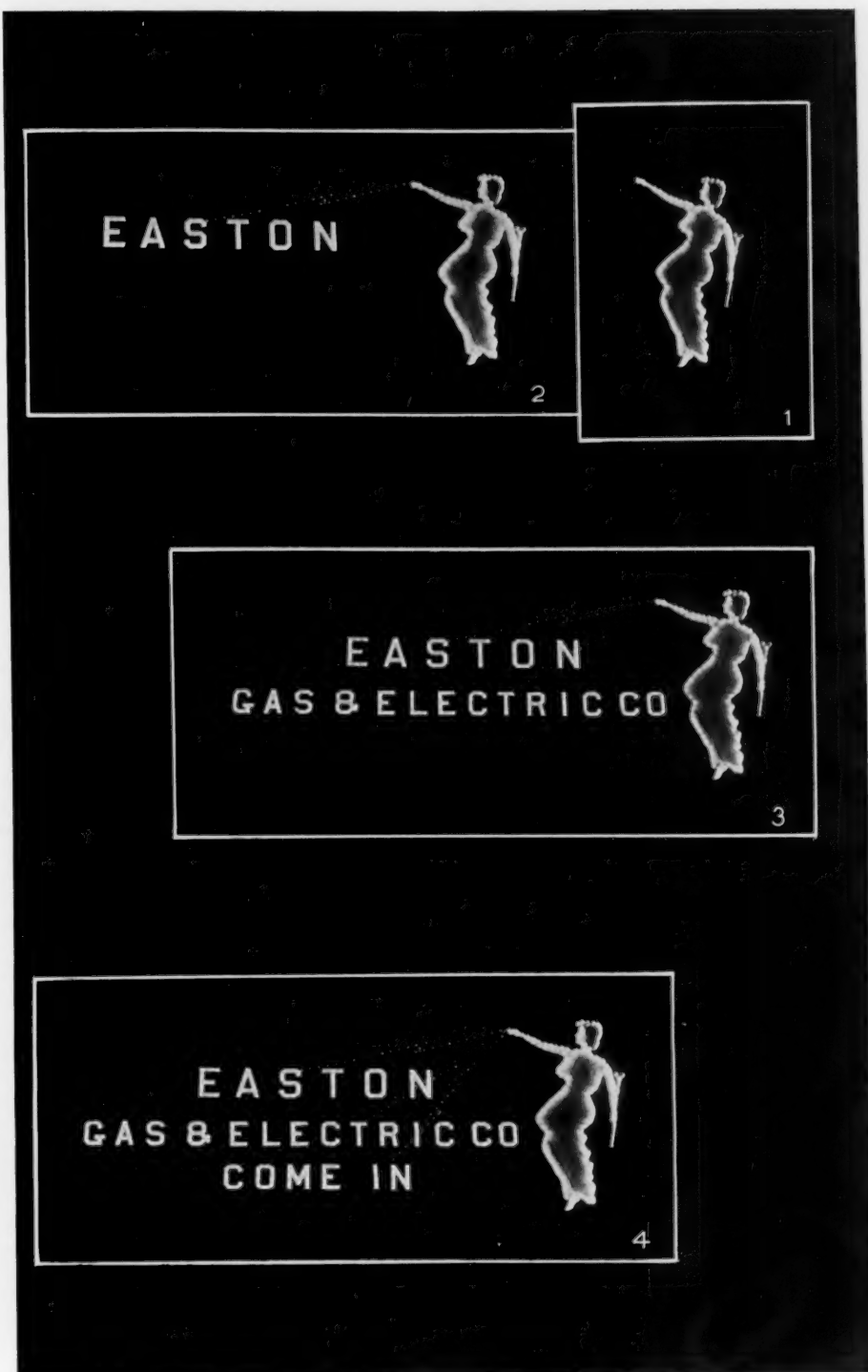
Two of the three-column-width newspaper ads announcing the slogan sign

Mayor, a prominent real estate man, the proprietor of the largest department store, a leading physician, members of the Select Council and the editors of the four local papers, three dailies and one weekly. The offer of the sign and the call for a slogan was received with great enthusiasm, and suggestions came pouring in by the hundred from men, women and children and were all published in the newspapers, with stirring editorial appeals for co-operation and much praise for the Easton Gas & Electric Co.

The city of Easton possessed a Board of Trade, but it had been two or three years since the last

meeting and the organization was practically dead. General Manager Cresson, who is an old resident of Easton and a gentleman of high standing in the community, set to work at once among the members of the old Board of Trade and succeeded so well in arousing their enthusiasm for the "bigger, better, busier Easton" that a meeting of that body was held on January 15th for the purpose of reorganization.

This meeting was open to the public, who were cordially invited to attend. There was a general discussion of plans and projects for public advancement and Mr. Cresson being called upon to speak in behalf of his company, explained what he wanted to do. He also reported that the Slogan Committee had met the night before and adopted as their choice of words—Easton—City of Resources. Mr. Cresson offered the slogan to the Board of Trade and it was adopted for use on all stationery and to be advertised for the city's betterment. Mr. Coughlin was called upon to describe the methods employed for the booming of Denver and how the Denver Gas & Electric Co. and the Denver Board of Trade had co-operated. As a result of the meeting, a large new membership was enrolled and a considerable sum of money was subscribed for actively advertising Easton as an industrial centre. The Easton Gas & Electric Co. headed the list with a gift of \$100.00. The membership fee was also reduced to \$5.00 and eight or ten of the employees of the company joined. A secretary and manager was appointed on a salary to



The Sign on the Office of the Easton Gas & Electric Co.

First is seen the figure of the goddess in frosted lamps (1), then a flash of green forked lightning shoots out from her hand and the word EASTON appears (2). Successive strokes of lightning throw out the two additional lines as shown in 3 and 4. Then comes a red border. Size of sign, 35 ft. by 20 ft.

prepare and distribute literature.

The slogan was received by the people with unexpected enthusiasm, the press featured it strongly, local advertisers worked it into their copy, and it is imprinted on the city stationery and the envelopes of numerous business houses.

At the next meeting of the Board of Trade, Mr. Henry L. Doherty appeared personally and talked to the Easton business men. The meeting had been widely advertised and over 350 were present. Mr. Doherty preached a sermon of co-operation and urged the Easton people to work from the inside to upbuild their city and make it an inducement for outside industries to locate with them. This talk was taken very seriously and a number of Mr. Doherty's suggestions have since been adopted and developed.

In the meantime, through the medium of the newspapers, the Easton Gas & Electric Co. has been constantly and consistently advertised, both through paid space and by the distribution of news. A large animated sign 35 ft. x 20 ft. and burning 600 lights has been erected on the roof of the office facing Centre Square (See page 207) and every effort has been made to cultivate cordial relations with the public.

Finally, after many disappointing delays, the big slogan sign was completed and erected on the roof of the company's storehouse, located on the river front and facing all six railroads. The night the sign was turned on was unfortunately rainy and disagreeable, but in spite of this the big sign created wide interest

and approval and the people were lined up along the Phillipsburg hill and on the bridges. Next night the town turned out and watched it and now with every train that passes through the city by night or day the name of Easton spreads abroad as the "City of Resources."

The sign is a success. A new life has been aroused in the city.

Mr. J. P. Correll, editor of The Sunday Call in talking of the work that the Easton Gas & Electric Co. has done for the city, said "The liberality of the company has brought about a marked change in the attitude of the people toward public matters. They are grateful for the broad-minded policy which the Easton Gas & Electric Co. is pursuing and have awakened to the opportunities which such work will unfold."

Meanwhile, Mr. Coughlin's staff is closing contracts. 1015 H. P. in motors has been signed up in five months and several signs and much gas fuel business has been secured. The sign situation unfortunately is badly crippled by an obstructive sign ordinance which forbids any projection over the building line. This, however, is so opposed to the spirit behind the new movement, that a more modern and progressive ordinance may be expected in the near future.

Already one new industry has been located through the efforts of the Board of Trade and if the people of Easton support their slogan sign with as strong a will as has thus far been evidenced in the campaign of the Easton Gas & Electric Co., a new industrial life for Easton is assured.

Ornamental Curb Line Illumination

A Paper Presented at the Convention of the Iowa Electrical Association, Cedar Rapids, Iowa,
April 21st and 22nd, 1909

By D. F. FRADETTE, CONTRACT AGENT
DES MOINES ELECTRIC COMPANY, DES MOINES, IOWA

THERE is probably no subject of more interest to central station commercial men right now, than decorative street lighting, and the comparative merits of ornamental lamp posts and arches. As a result of an investigation, carried on by the Des Moines Commercial Club and the Des Moines Electric Co., and judging from letters received from manufacturers and central stations all through the country, the consensus of opinion seems to be that for street lighting purposes the pole is the one most desirable.

We have in Des Moines a Commercial Club, or "Boosters Association," and this organization decided that the city streets should have some form of decorative lighting. With the assistance of the Des Moines Electric Co., they investigated various systems and determined upon iron poles. The company then got prices and photographs of nearly every type of pole on the market and submitted them to the Commercial Club, which selected the type having one lamp at

the top of the pole, and one inverted lamp on each arm, the inverted lamp being deemed best adapted to street lighting.

After deciding upon the type of pole, probable cost of installing, and cost of lighting, the matter was taken up with the City Council. The Council passed an ordinance making the type of pole selected by the

Commercial Club standard for the city, and stating that the pole spacing should not exceed 56 feet nor be closer than 44 feet. The casting of the poles cost \$59.00 each; and set up complete, and connected ready for turning on the lights, the installation cost \$85.00 per pole. The Electric Company then followed with an active



D. F. Fradette

campaign among the property owners ably assisted by committees of local merchants. Each Committee forming in its own block, endeavored to exceed the others and the success of the scheme was apparent almost at once. There was little or no trouble getting the first 70 poles, and the more we got the easier it made the rest. As an instance of

the willingness, and I might say even the eagerness, of the merchants to light up, there is one block which we call the "400 block" (the numbers running from 401 to 500) where, after the two blocks above it had each installed 12 poles to the block, in accordance with the ordinance it was decided to install 16 poles to the block, that is 44 feet



Lamp Post Adopted as City Standard in Des Moines, Iowa

apart. These were installed, and the additional poles made such a vast improvement that we have now three other blocks in which committees have been formed, following suit.

Such a campaign makes considerable work for the new business department, but not nearly so much

as would be supposed; as for instance, only last month two merchants in different blocks notified us that they had been out soliciting, and requested us to submit contracts, which they offered to have signed. This move was unknown to us, as these merchants had simply set about to improve the appearance of their own block. This same spirit is shown by all, and from this I think you will agree, that it is not a difficult matter to secure this business, once it is clearly outlined to the people.

Our method of charging for these poles and the lighting is to base each man's proposition according to his foot frontage; the property owner paying for the pole and installing it, and the tenant paying for the lighting. To date, this method of charging has been perfectly satisfactory and we are having no complaints. Each pole is equipped with a lock switch in the base, and the lamps are lighted by the patrolman, as he makes his rounds turning on the flat rate windows and signs. At 12 P. M. they are turned off. Our rate per year for lighting each pole equipped with 5 100-watt tungsten lamps is \$69.50.

In Los Angeles, Cal., a city of approximately 150,000 population, the decorative street lighting scheme originated with the merchants of Broadway, who organized, and with the assistance of The Edison Electric Company, installed a pole costing \$100.00 complete. Soon after the installation of poles on Broadway, the merchants on Spring and Main streets also organized and

they too had the assistance of the electric company. Each street had its own type of pole, but there was no material difference. The poles were placed 115 feet apart, on both sides of the street. In each of the balls shown there are 3 8-cp. lamps. An attempt was made to use tungsten lamps here, but it was a failure, as the jarring from the passing street cars broke the filaments. I might add that we have had no such trouble with our lamps, which are 100-watt tungsten and seem to be giving perfect satisfaction.

The Edison Electric Co., of Los Angeles, Cal., calls our attention to one defect in the pole installed by them which is, that the middle ball should be raised at least six inches, otherwise it will give the post a squatty appearance, and the large center globe will be almost obscured. I have seen poles having this same defect, and it is well to guard against it when choosing a design.

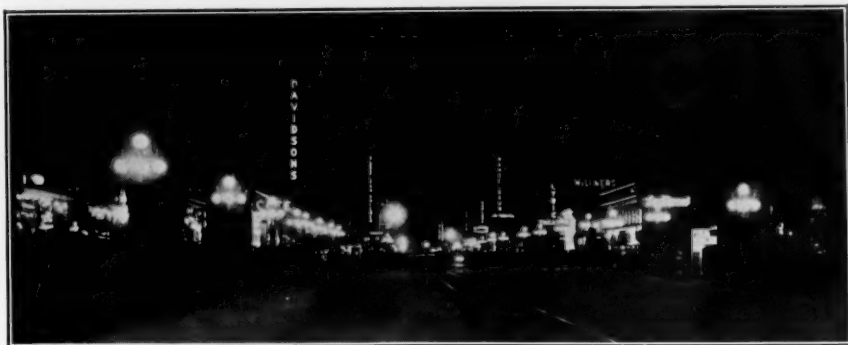
The lighting of these poles was paid for by the city, the casting by the merchants and property owners, and the cost of installing was borne



Three Types of Lamp Posts in Use in Los Angeles, Cal

by The Edison Electric Company. The circuits are so arranged that all poles burn until midnight, after which they are all turned off but two corner poles, which are left burning all night.

In Oakland, Cal.,—70,000 inhabitants,—there are now installed over 600 3-ball posts, and each ball contains 3 16-cp. lamps. These posts are placed three on each side of the street or 6 to the block, and the cost of each pole is approximately \$85.00 set up complete. The solicitation and installation was done by a private contractor. The cost of installing was borne by the merchants.



Decorative Street Lighting. Walnut Street, Des Moines, Iowa

The lighting is paid for by the city. The Oakland Gas, Light and Heat Company calls our attention to a defect in their poles in that the globes being turned upward, give a very unsatisfactory light. This is another item worth watching. The pole used in Oakland, with the two side globes turned downward should be well suited to the smaller cities, as the pole is not of expensive con-



Decorative Lamp Posts, Sixteenth Street, Denver, Colo.

struction, and 1 60-watt or 100-watt tungsten in each globe would be an economical and very attractive system.

In the city of Denver, Colorado with 150,000 population, we have an entirely different arrangement, but a very novel and attractive one—the result of co-operation between the electric railway, The Denver Gas & Electric Company, and the city. Here they have used the trol-

ley pole over which was fitted a square ornamental casing in order to cover the slant of the pole, which was supposed to be necessary to offset the strain of the railway span wires. On each pole are two brackets, one extending over the street, and one over the walk, from which are suspended two arcs. There are 113 of these poles on Sixteenth Street, spaced 90 feet apart on both sides of the street or 4 pairs of poles to the block. The casing of these costs \$160.00 and was paid for by the city. The lighting cost is also paid by the city at \$60.00 per arc per year. On Fifteenth Street no casing was necessary, as the trolley company allowed the poles to be straightened and a bracket costing \$50.00 and mounting only one arc, was paid for by the city. There are 123 of these poles on Fifteenth Street spaced as on Sixteenth Street.

In Superior, Wis., where there are 50,000 people the choosing of the system to be installed, the style of pole and the soliciting of the business was done by the Publicity Committee, the local electric company installing the poles as requested. Superior has installed a 3-lamp post, the side lamps being 100-watt tungstens, and the top lamp a 40 watt tungsten. These poles are so wired that the side lamps may be turned off at 12 P. M. and the small middle lamp left burning all night. The poles are spaced about 55 feet on both sides of the street or 16 to a block, and the cost per pole has averaged \$80.00 complete. These poles are lighted from an independent circuit set in a

groove which was chipped from the edge of the cement walk. This same system of connecting the poles by setting a conduit in a groove in the pavement seems to be most popular, but many cities, as in the case of Des Moines, have merely fished the wires under the walk and connected to the nearest feeder, each pole being turned on by a lock switch in the base.

The accompanying illustrations, are reproduced from photographs taken in the various cities. Regarding the size of the globes best adopted for curb line lamp posts, inquiry develops that a diameter of 14 inches seems to be most popular and gives the best results. From the standpoint of artistic merit the superiority of the decorative lamp post as compared with arches is unquestioned, when the day-light appearance is considered. Other strong advantages of the lamp post lie in the fact that it is less of a menace to the fire fighters, that it gives a more concentrated light,



Lamp Posts Used in Superior, Wisconsin

evenly distributed over the sidewalks, and that the percentage of useful light per kw. is much greater than in any form of arch.



Decorative Street Lighting, Superior, Wisconsin



H. W. CHASE
Contract Agent
The Dayton Lighting Co., Dayton, Ohio

Men Who've Made Good

Intimate Sketches of Successful New Business Men

No. 4. H. W. CHASE

BY FRANK B. RAE, JR.

THERE are three stages to any man's preparation for success:—getting an education, making good individually and learning to rule other men.

No matter who the man nor what his work, education is the first requisite. And by education is not meant simply book-knowledge; I mean a broad, thorough understanding of principles and a mind trained to the practical application of those principles to the every-day problems of business. Real "know-how" underlies every success. That is final. When you hear of some chap stepping in and making good at a job he knows nothing about, rest assured that somewhere, sometime that man delved out and assimilated the fundamental principles which led to success in the job. A monkey trained to climb trees in the jungle finds no difficulty in shinnying up a telegraph pole in the city. But get this point straight: it's the principle that constitutes education, not the practice. You get education, not by knowing *what* to do, but by knowing *why* you do it.

The making-good stage of development is easy and the rules which govern it can be boiled down to one word—hustle. Get on the job and stay with it. Don't dawdle; don't dream; don't procrastinate;

don't make excuses; don't do a blamed thing but work. Making good at one job is the softest kind of a soft snap. You can't go wrong if you plug and hustle.

When it comes to ruling men, a peculiar kind of genius is necessary. That is where H. W. Chase, Contract Agent for The Dayton Lighting Company, shows "class".

I have watched Chase pretty closely, trying to solve the mystery of his power to rule men. He has a little department of four men and two girls. They are working in a little city where almost everybody knows almost everybody else. The department is so small and the city is so small that it's next to impossible to stir up any artificial spirit of competition, yet Chase has that little crew on the keen jump from Monday morning to Saturday noon, and the amount of business they turn in would make some of the big, boastful companies green with envy. How does he do it? Are his people particularly good? Are his conditions especially favorable? The answer to all three questions is—Chase.

Chase is fat—200 pounds or so—with a lumbering, unattractive presence, with clothes that somehow look as though he'd slept in them, and with a left-handed man-

ner that seems to mark him as an also-ran. He doesn't say much nor look as though he thought much. He has the appearance, the air, the manner of a man who'd been raising Cain the night before and whose only regret is that he can't sleep a few hours longer. In short, Chase looks about as much like a master of men as he does like a Marathon record-holder, but—

When Chase goes into the morning meeting of his solicitors there is action—sure, swift, effective. One man who reports a big contract is warned not to pause for self-congratulation: "Now that you've struck your real stride, keep at it," he says. "I'll expect more of you from now on." Another who has had an off day is given a private talking to which generates a do-or-die spirit and braces him for the coming day. Those whose reports are just ordinary are left to feel that they're just ordinary men, unworthy of notice. Perhaps Chase uses twenty-five words altogether in commenting on the day's work, but those twenty-five carry more encouragement, censure and inspiration than four thousand by anyone else. When the daily reports from each man are in Chase talks for about ten minutes. There is none of the hurrah-boys, whoop-it-up, watch-our-smoke stuff. Nothing like that. It's a sane, sensible clean cut appeal for co-operation and results. And it gets the results.

How does he do it? I'll tell you in one word:—confidence. Chase has confidence in his men, in his

company, in himself. He holds the confidence of these same men, of the company and of the public. When he speaks he expresses the boiled down essence of years of keen observation and much cruel experience. For Chase has received the major part of his education in the College of Hardnocks and the things he knows have pretty much been hammered into him with a club.

I have said Chase rules by inspiring confidence. That is the secret of all control. The man who rules by force or fear is unworthy of holding command. The man who rules because he has a title is less worthy. Chase runs his department because his men know that he can do all they can do and then some. They know he is always and inevitably on the level. In short, they have absolute and implicit confidence in his ability and his sense of justice—and that means that they would work their hearts out for him. It's easy to do work when the good is appreciated.

H. W. Chase began work in the central station field by soliciting for the Binghamton (N. Y.) Gas Works at \$9.33 per week. After a year and a half he was sent to Lebanon, Pa., and from there to Denver. Under Mr. C. N. Stannard, the now famous school-master of central station salesmen, he learned something of the electric end of the business and made sufficient mark to be picked as one of the Division Managers sent to Cincinnati by Mr. Henry L. Doherty to stir up the Union Gas & Electric Company.

After making good there, his foot slipped, but George Williams, whose insight into men is keen and true, knew the lapse was only temporary, so used influence to get him an opportunity at Dayton. That was July 1907, and his record since has justified every confidence that has been placed in him.

That is a short-hand account of how a big man made good. But here is one of the side-lights, an incident which happened during the panic when the Dayton Company eliminated its commercial department. I will tell it in Chase's own words:—

"While the so-called panic was on, I began looking around to find an opportunity to earn an honest dollar. I finally decided to try the coal regions for there business seemed to be pretty good. I applied to Mr. K. J. Ross, President of the Citizen's Illuminating Company of Pittston, Pa. Mr. Ross had been very unfortunate in getting hold of representatives who demanded high salaries but could not or did not deliver the goods. Naturally he looked upon me as a "hot-air slinger" out of a job. The first

thing he did was to discount my rated salary value 50 per cent then ask me what I could do. I certainly made him think I could do something, for I needed the money. There are 20,000 inhabitants in the burg and during my stay there I secured 27 old houses to wire and connect, 21 flat rate window propositions and 5,000 2-cp. equivalents in new signs, all operated on a 12 o'clock schedule, besides the usual number of small additional jobs requiring no service. This was accomplished in three months."

Some of you men in cities of 20,000 try to beat that if you think you can.

Perhaps I have been a bit harsh in picturing Chase as an unattractive and slovenly specimen of pan-handler. He's not that, by a long sea mile, but his best friend would never claim for him a winning personality. That, however, only makes his success the more remarkable. With none of the superficial graces, none of the society manner, he gets and holds in a steel grip the confidence of those above and those beneath.

That's success.



The Iowa State Convention

THE Iowa Electrical Association held its ninth annual Convention in Cedar Rapids on April 21st and 22nd. Mr. L. D. Mathes, General Manager, Union Electric Company, Dubuque, Iowa, whose term as president expired with the conventions, writes:—

"We had the best state convention at Cedar Rapids ever held in Iowa—with a large attendance, an excellent program, free discussion, and much benefit to all. You would

have been more than surprised to have seen the line of exhibits—the National Convention never put on a better show than we held at Cedar Rapids. The trade sent us the best stuff they had and plenty of it. The convention hall was ideal for the purpose, the exhibition hall the same."

It is a most significant fact that the entire program of this convention was devoted to commercial matters. Here is a full list of the papers presented:

- "The Portable Vacuum Cleaner."—Mr. O. E. Brownell, Lake City.
- "Applications of Electricity in the Modern Home."—Mrs. L. D. Mathes, Dubuque.
- "The Effect on Central Station Revenues Through the Introduction of the Tungsten Lamp."—Mr. Thomas Ferris, Osage.
- "Ornamental Curb Line Illumination."—Mr. D. F. Fradette, Des Moines.
- "Twenty-four Hour Service in a Town of 2500 People and Methods Adopted to Increase Day-light Load."—Mr. M. A. Harrison, Nevada.
- "The Aid of Prismatic Reflectors to the High Efficiency Unit."—Mr. Morgan P. Ellis, New York.
- "The Progress of the Introduction of Heating Units by Central Station Companies."—General Discussion.
- "The Story of a Successful Sign Campaign, with Facts and Figures."—Mr. J. B. Lindl, Dubuque.
- "Selling Electrical Domestic Appliances in a Small Town."—Mr. W. W. Sterns, Humboldt.
- "The Importance of Close Inspection of Customer's Installations."—Mr. W. J. Greene, Cedar Rapids.
- "Does it Pay the Central Station to be Broad-gauged in Dealing with its Customers?"—President L. D. Mathes.

The paper by Mrs. L. D. Mathes was particularly interesting as being the views of a woman who combines with her domestic instincts, a thorough familiarity and sympathy with the central station view point. Mr. Fradette's paper on Decorative

Lamp-posts, appears in this issue of SELLING ELECTRICITY.

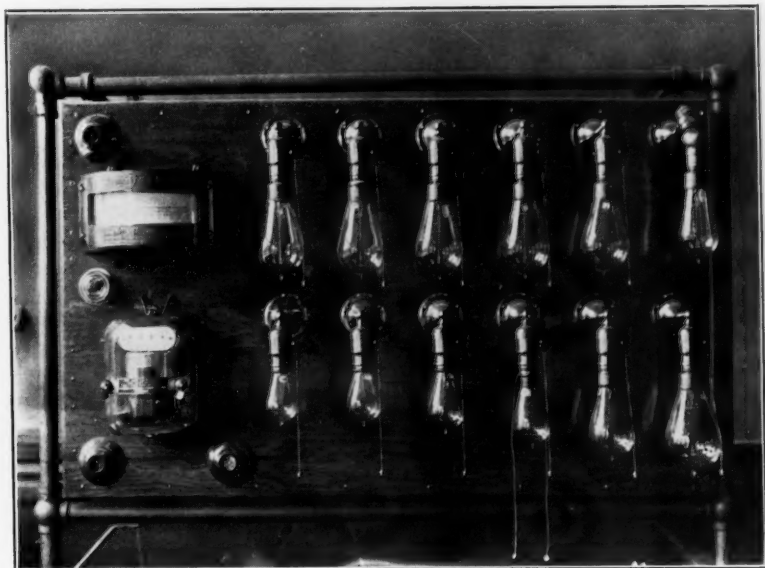
The Iowa Electrical Association has certainly gauged the times and is taking the lead in the recognition of the dominating importance of the commercial problem.

A Demonstration Board for Settling Complaints

BY JOHN G. LEARNED, CONTRACT AGENT
NORTH SHORE ELECTRIC COMPANY, CHICAGO, ILL.

ONE of the most convincing arguments which we have ever had at our command for demonstrating to a customer that the electric meter records accurately is a wooden panel board on which is mounted 12 lamps and two meters,

lower meter is the standard indicating wattmeter, and in addition to the bank of lamps there are three idle sockets provided for attaching various current consuming appliances and showing in dollars and cents the cost of operating them.



North Shore Electric Company Demonstration Board

as shown in the accompanying photograph.

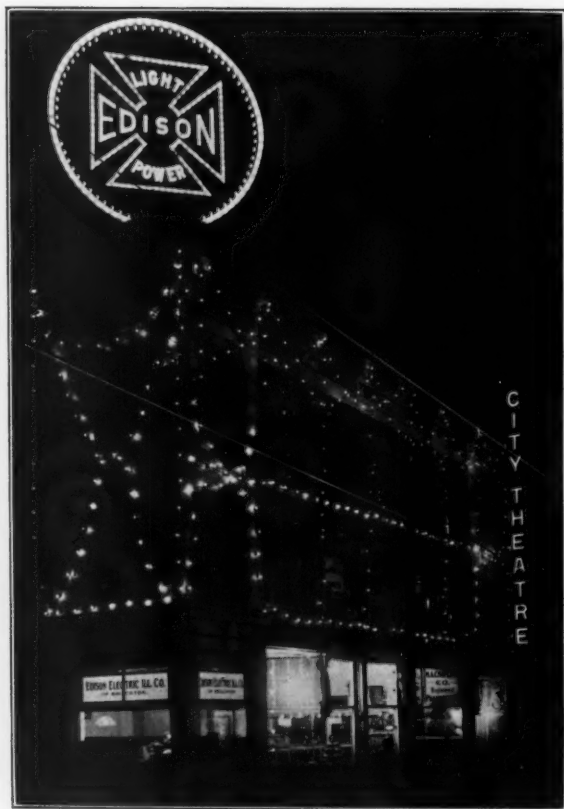
The upper meter is a recording wattmeter with a scale change to indicate the consumption and the cost per hour under either a 13 1/2c. or a 10c. rate when operating the various lamps or combinations of lamps. The scale of the meter dial is five divisions for each 100 watts. The

This scheme originated in our engineering department and was first given a try-out at the Electrical Show, held in Chicago last January. The board was of great interest to other central station men, as well as to the public at large. We have since installed them in each of our four district offices in one of which the outfit is so arranged that the

board may be swung forward at night and becomes part of the window display. The board itself is made of highly polished oak and is mounted on an iron rack.

We use the outfit continually in all our offices in explaining to customers the principle of the meter

and the comparative consumption cost of lamps of various types and candlepowers. There is nothing so convincing as an optical demonstration and the insight which this board gives into the inner workings of the much suspected meter seems to be particularly interesting to the average consumer.



The New Office in Brockton, Mass.

The Edison Electric Illuminating Company of Brockton, Mass., has recently moved into a new office. The sign and outline display is a good example of electric advertising "at home."

Why should there be so many dark and gloomy central station offices?



What Electric Heat Means to the Shoe Manufacturer

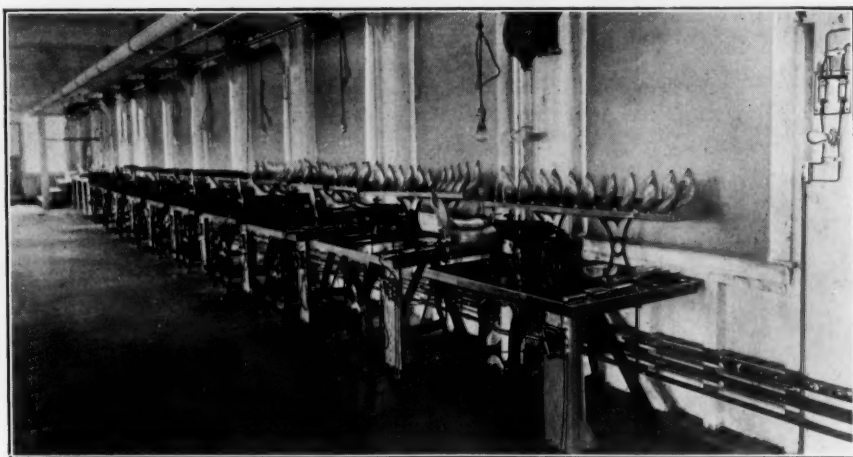
Finding the Central Stations Interested, a Manufacturer of Shoemakers' Tools has Developed a Large and Growing Market for Electrically Heated Appliances

BY E. L. EMERSON, PRESIDENT
BOSTON LAST COMPANY, BOSTON, MASS.

[This article is particularly interesting as representing the point of view of a practical manufacturer who knows the needs of his own trade. The fact that, though favoring central station service, he has been forced, in many cases, to recommend the private plant is unfortunate and food for thought. The shoe industry is, of course, largely restricted to the New England states, and the majority of stations cannot secure this business in bulk. Should it not be possible, however, to introduce some of these finishing tools into the shoe repair shops? —EDITOR.]

IN the last three years we have sold to shoe manufacturers, between six and seven thousand special electric heating appliances. This apparatus has been placed not only in the United States, but in Canada, Mexico, England, France, Germany, Scandinavia, Australia, Peru, Chili, Ecuador and Argentine, though the greater majority are installed in this country. With the

keen competition that exists in the shoe business, every manufacturer is bound to keep up with his competitors. When he is faced with the proposition that with electric heat he can get superior work in manufacturing, at less cost and with better conditions for his working people, and less danger from fire and accidents, he is bound to investigate. When by their use he has proven



Treeing Room, Regal Shoe Factory, Milford, Mass., where Electrically Heated Treeing Irons are in Use

their economy and durability, permanent installation follows as a matter of course.

We know of no central station to-day that is making any effort to sell current to take the place of steam, gas, or oil for the heating of the different appliances and machinery used in the manufacturing of shoes. They seem to devote their whole energy to power and lighting, and when we have brought the matter to the attention of the manager, with a few notable exceptions, he has failed to show any interest or co-operation. These few have made a low day rate, volunteered to put in separate meters, and helped in every way possible in the installation. They are reaping their reward. But the lack of interest and absolute indifference that we have encountered in some sections is well nigh unbelievable. In one instance, right next to a city where we were allowed a six cent rate and secured hearty co-operation, we were refused all consideration by a central station of equally high standing. They insisted on a fifteen cent rate and the result was that though the former plant secured a large volume of profitable heating business from the shoe industry, in the neighboring city four of the prominent manufacturers, largely through our efforts, installed their own generators, and the central station eventually lost their lighting load as well.

Nearly every factory needs in the stock room, toilet room, or halls more or less light all day, and when a manufacturer realizes that by the installing of a five kilowatt genera-

tor, (with no appreciable pull on his power) he has done away with his gas bills, gasoline bills for carburetor, long leads of small steam pipes from his boilers, and the use of kerosene lamps, to the great satisfaction and endorsement of the insurance inspectors, he is apt to look up the further installation of a large generator to take care of all requirements at all times.

The opening wedge for electric heated tools in shoe factories was the commonly called treeing iron, a metal tool used for forming and smoothing up all shoes after cleaning and before packing for shipment. This iron had previously been heated by open gas stoves or kerosene lamps, and since naphtha, alcohol, and other inflammable compounds are used at the same time, accidents to employees were common, and fires were so frequent that the insurance inspectors urged the adoption of the electric iron. The result was that more than five thousand have been installed in the last four years.

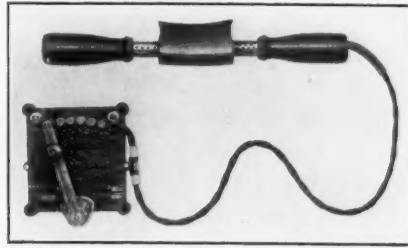
Shoe manufacturers are convinced that not only are all conditions better, but the character of the finish given to the work by the electric heated tools cannot be obtained with tools heated by other methods. Best results may be secured with a tool of constant, even temperature, free from soot or smut. This was impossible when heating the tool in an open flame. Also better work is procured without any extra effort on the part of the operator, making it possible for indifferent operators to turn out far better work than they otherwise could, equal to or better

than the product of the most careful workmen using other tools.

The great success with the treeing iron created a demand for appliances to take the place of the stoves required for heating wheeling tools and irons for burnishing bottoms and edges, and knives and tools for repair work, and for melting wax and heating water. These have all been taken care of, and in prominent shoe factories, like the W. L. Douglas Shoe Co., Regal Shoe Co., and Queen Quality Shoe Co., they have hundreds of these outfits in use.

The advantages of electric heating over all other methods as to economy, benefit to employees, safety from fire, and the ability to operate at all times and in any part of the plant, caused the prominent shoe manufacturers to urge the invention and manufacture of electric devices for all the different machines in their factories requiring heat. They gave their guarantee that they would adopt them as soon as proven practicable.

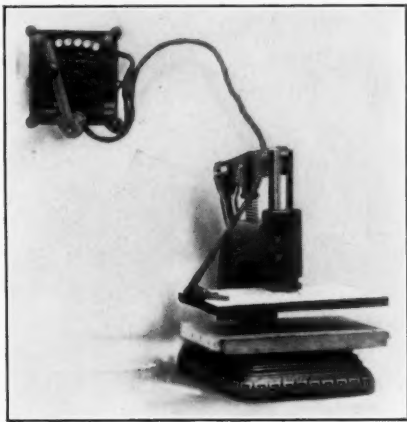
The experts of the Simplex Elec-



Electrically Heated Treeing Iron

tric Heating Co., and of the Boston Last Co., have been diligently at work for two years, and are now installing heaters for the Union and Ross-Moyer edge setting machines, stamping machines for making the impressions on the soles of the shoes and for cutting out linings and heel pads, for the machines for creasing the vamps of the shoes, for the indenting machines, and the Lockett crimping machine. Another achievement has been an electrically heated press for doubling thin leather parts of the shoe with a backing of rubber covered cloth. This press will fill the demand also for photographers, book binders, and others needing a high heated press of quick action, taking up but little room, which can be installed wherever electric wires can be run.

The latest success has been obtained in taking care of the Good-year welter and stitcher, which always required steam for operation, and therefore had to be placed in that part of the factory adjacent to the steam boiler, and necessitated the running of the boiler at all seasons of the year. Many modern factories are operated by electric power obtained from a central station, and a great part of the year



Electrically Heated Press Used in Manufacturing Shoes

have no call to run a steam boiler except for these machines. With electric heaters for the wax pots, and an electric steam boiler, that will take care of a battery of machines for the steam requirements, it has been demonstrated that there is a great saving in wax which in the steam heated pot boils over, causing the loss of wax, danger to operators, and goods in process; also the machine may be placed in the most convenient part of the factory, and the steam plant is not required, except for heating the building. There are two new factories now building which are to be completely fitted with these appliances.

In approaching a possible customer to sell electrically heated shoe appliances, it doesn't do to talk in ohms and watts. The manufacturer wants to know in dollars and cents what it is going to cost to run them for a working day. He knows what horse power means, he also knows about what it costs to run a sixteen candle power lamp. Therefore when you tell him that any appliance that takes 100 watts will cost him the same as two sixteen candle power lamps, you have no trouble as to his understanding, and the cost is so much less than he expected that generally you have only to prove your statement to make a sale.

The opinion is so prevalent that electric heating appliances are not

only expensive but short lived, owing to the failure of earlier apparatus, that it is nearly always necessary to install the appliance on trial to prove that it is not a luxury but essential to obtaining the best results at the lowest cost and under the safest and most sanitary conditions. Every manufacturer capable of meeting the present day competition must realize that this is the electric age. He knows it is here, and is waiting to be shown.

The place to buy electric current is from a central station, and it is the duty of the managers of these plants to show the would-be consumer the economy in purchasing his product. Managers who fail to show any interest and refuse to make any difference in the charge for current for day use, and require the factories to connect appliances with their lighting service wire, in opposition to the Fire Underwriters inspectors, compel the manufacturers to put in their own generators. This they are doing and will do, and the central station manager who is so short sighted, not only keeps his own plant down, but is damaging the prospects of other central stations. Moreover, he is furthering the interests of the gas companies, which are not only making special heating rates, but are furnishing at little or no cost all the appliances that manufacturers will install.



Central Station Possibilities

BY FRANK W. FRUEAUFF, VICE-PRES. & GEN. MGR.
DENVER GAS & ELECTRIC CO., DENVER, COLO.

THE experience of the past eighteen months has demonstrated to most central station managers that there are still limitless possibilities in the development of the market, and has clearly shown that the public is alive to the advantages in the use of electric current. The use of electricity has become so much of a necessity that in spite of the recent curtailments enforced in the many branches of business and in the reductions of household expenses, the sales were little affected in cities or districts which were noticeably retarded, and many places show the same continued rate of increase. With this further evidence of the stability of our enterprise, it is more incumbent on us than ever to go out and exploit the field to the fullest extent.

The methods and devices which two or three years ago seemed not only novel but of questionable practical benefit, are today becoming essential. Electrical charging machines are affording a big field for the central station, and the possibilities of this class of business seem limitless as the popularity of the auto increases. Bearing in mind the advantages of improved load

factor, this class of service appeals especially to the central station, as well as other forms of day power or late hour lighting or power.

Little need be said of the advantages of individual drive motors. They have come into the field and today are one of the best talking points in inducing operators of steam plants to abandon them and adopt central station power. The isolated plant, which at one time seemed a menace to many of the companies in the large cities, is becoming less and less popular as we have demonstrated the economy and satisfaction in the supply from the central station. Yet there are still plants that can be shut down with profit to the user and greatly improve the operating conditions of the local company.

With all the efforts made to take on new business, we must never lose track of the all-important feature of best service, and under this we must not only include best regulation and constant supply in the current actually sold, but the best attention must be paid to the needs and requirements of the consumer. Systematic inspection is becoming more and more popular and it is not



Frank W. Frueauff

only a practical advantage but a necessity in many parts of the service. There are still many features of the business that the average consumer is unfamiliar with and everything done to familiarize him with methods used and reasons for same, tends to improve the general efficiency of the service and the harmonious relations existing. Good service, with proper maintenance and inspection, is the most satisfactory way of meeting gas lighting competition. If we will trace the success of gas lighting in many cities, we will find that gas companies give best service through constant inspection.

We are all anxious to get the maximum returns per dollar of investment, and as the central station business grows faster than the natural development of a city, we can see that there are limitless possibilities ahead of us. Many of the electric household utensils have proven entering wedges in popularizing the use of electric current, and while some of them individually may be of comparatively small value from the consumption standpoint, they, in the long run, lead to added sales. The use of the electric flatiron is probably the best instance of an original novelty becoming an absolute necessity. Experience shows that most housewives, once having used them, would not, and feel they could not, get along without them, and they tend to improve our day load and increase the consumption most satisfactorily.

None of us are satisfied that our gross earnings increase only at the

rate at which the population increases. We are anxious to show a faster rate of growth. In many cases this increase in growth per capita has been running at \$1.00 per year for several years past, with no apparent indications of a let-up; all this simply going to show that we are nowhere near the limit of our field.

As an advertising medium, electricity has taken its place as the most satisfactory, and yet there are numberless ways in which its application can be further increased. Central stations, for instance, might co-operate for the promotion and handling of the national advertiser's business, that is, inducing the national advertisers to prepare signs under a blanket contract exhibiting these signs in different cities, over a long period of time. In this way all of the companies would receive some benefit from a hitherto undeveloped field. The national advertisers would be enabled to reach a great many more prospects than when confining their efforts to a very few of the largest cities and being required to make an individual arrangement at each place.

While mentioned before, it seems only fitting to again call attention to the need of friendly relations with our consumers and to again point out the direct practical benefits in having their co-operation in your efforts to develop business. We must admit that oftentimes there are justifiable complaints and it should be our duty and pleasure to give a careful hearing to these complaints and remedy them where they are proper. In so doing, we add many possibilities to our business.

Method of Procedure in Canvassing for Power Business

BY R. L. LLOYD AND J. C. BROOKS, POWER EXPERTS
THE PHILADELPHIA ELECTRIC COMPANY, PHILADELPHIA, PA.

[This paper was entered in the prize contest for the best general plan of campaign to be followed in selling central station power and was awarded third prize. The first prize was won by Mr. Van Dusen Rickert, General Agent, Eastern Pennsylvania Railway Co., Pottsville, Pa., and the second prize by Mr. Roy A. MacGregor, Power Specialist, Easton Gas & Electric Co., Easton, Pa. These papers were published in our February and March issues respectively.—EDITOR.]

IN opening an important case involving a power installation, the first visit is made with the avowed intention of going no further than arousing interest and getting permission to present a proposition. We make every effort to reach the head of the business, and refrain from talking dollars and cents or quoting rates. The argument takes the following form:—

“Mr. B—— we know that the details of the power supply of your factory are seldom brought to your notice. We have no reason to believe they are not up to the standard. But we want to call your attention to the rapid strides recently made in electric motor equipment and the economies experienced when using central station service.”

Then we cite a few instances of large installations and prominent consumers, and say we would like to have the opportunity of showing

him what we could do for his establishment. It will cost him nothing but the time to examine our figures. We may be able to save him some money.

This is purely a business proposition and the permission generally is granted. We then state that to prepare this statement fully and intelligently, it will be necessary to have our testers indicate the engine and get such other data as is required for the purpose, and request that he kindly inform the superintendent so that the testers can arrange to be there at a time when it will not inconvenience anyone. These little issues generally give us an “open sesame” to the entire factory and we proceed to lay out the case.

The data is obtained, worked up and presented as in the following plant analysis covering a recent installation made by this company.

PLANT EQUIPMENT.

Boilers:

2 HRT Boilers, 85 H. P. each.....	170 H. P.
2 Heating Boilers, 100 H. P. each.....	200 H. P.

Engines:

1 Corliss 60 H. P., 14½ in. x 40 in. Engine, 65 RPM.....	60 H. P.
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Pumps:

- 1 Carl & Muckle 8 x 4 x 6 in. Simplex D. A. Boiler Feed.
- 1 Worthington 18½ x 10¼ x 10 in. Dup. D. A. Elev. Pump.
- 1 John McGowan 18½ x 10¼ x 10 in. Dup. D. A. Elev. Pump (emergency).
- 1 Carl & Muckle 8 x 4 x 6 in. Simplex D. A. House Tank.
- 1 Cameron (dismantled).
- 1 Fire Underwriters 20 x 8 x 18 in. Simplex D. A. Fire Pump.

Dynamos:

- 1 Richter 110 V., 10 K. W., K. W. Dynamo, belted..... 10 K. W.

Lights:

- 136 16-c.p. lamps on plant dynamo.
- 4 E. S.
- Central Station Service.
- 76 16-c.p. Lamps.
- 23 E. S.

Steam Uses:

- Exhaust steam used for heating building.
- Live steam used for heating drying rooms and cooking products.

Power Consumption (Engine Test):

Average running load, (16 cards).....	34.38 H. P.
Friction, dynamo on, (3 cards).....	28.59 H. P.
Friction, dynamo off, (3 cards).....	23.66 H. P.
Dynamo alone (lighting load).....	4.93 H. P.
Net work on engine (not including dynamo).....	5.79 H. P.
Work on engine (including dynamo).....	10.72 H. P.

Estimating 40% of friction (including the power necessary to run present dynamo) will be eliminated by proper motoring, (cutting down belting, etc.) we have an average running load of 22.94 H. P.
 22.94 x 2856 hrs. = 65516.64 H. P. hrs. = 49137.5 K. W. hrs. per year.

Pumps—Estimated Consumption:

House Pump, 3.75 H. P. motor, 60% L. F. Use this pump for boiler feed for heating.....	5164 K. W.
Elevator Pump, 30 H. P. motor, 40% L. F.....	27540 K. W.
Total Power	81841.5 K. W.

Light:

Average load 3.52 K. W.	
3.53 x 2856 =	10053 K. W. hrs.
Central Station present emergency supply.....	1631.5 K. W. hrs.
Total Light.....	11684.5 K. W. hrs.
Total Light and Power	93526 K. W. hrs.

Main Building:

PROPOSED MOTOR INSTALLATION.

1 30 H. P. Motor Elevator Pump	30 H. P.
1 3.75 H. P. " House Pump	3.75 H. P.
1 3 H. P. " Pulverizer, basement.....	3 H. P.
1 3 H. P. " Carver Cutter, 5th floor.....	3 H. P.
1 3 H. P. " Screw Cutter, basement.....	3 H. P.
1 3 H. P. " Churns, 7th floor	3 H. P.
1 5 H. P. " Mixer, 8th floor, churns and rolls	5 H. P.
1 10 H. P. " Machines on 3rd floor	10 H. P.
Total	60.75 H. P.

South Building:

One 3 H.P. motor, 2nd floor.....	3 H.P.
One 10 H.P. motor, 3rd floor.....	10 H.P.
One 1 H.P. motor, 3rd floor.....	1 H.P.
One ½ H.P. motor, 3rd floor, Docket St.....	½ H.P.
One 7½ H.P. motor, 5th floor.....	7½ H.P.
One 5 H.P. motor, 3rd floor, printing house	5 H.P.
	27 H.P.

Present Operating Expense:

One engineer	\$1,300.00
Oiler, helper.....	624.00
Two assistants	1,664.00
Labor, overtime.....	118.00
Coal, 1377 tons @ \$3.85.....	5,288.55
Removal of ashes.....	412.00
Water rent.....	142.92
Oil and waste	322.63
Emergency lighting	244.73
Lamp renewals	2.16
Repairs.....	159.15
Total	\$10,278.14

Proposal for Central Station Service.

Power Contract based on 87.75 H. P. in motors.

Lighting Contract for 212 16 c.p. lamps.

Our estimate of the use of these show a yearly power bill of.. \$4,092.08

Lighting bill of..... 876.34

Total

\$4,968.42

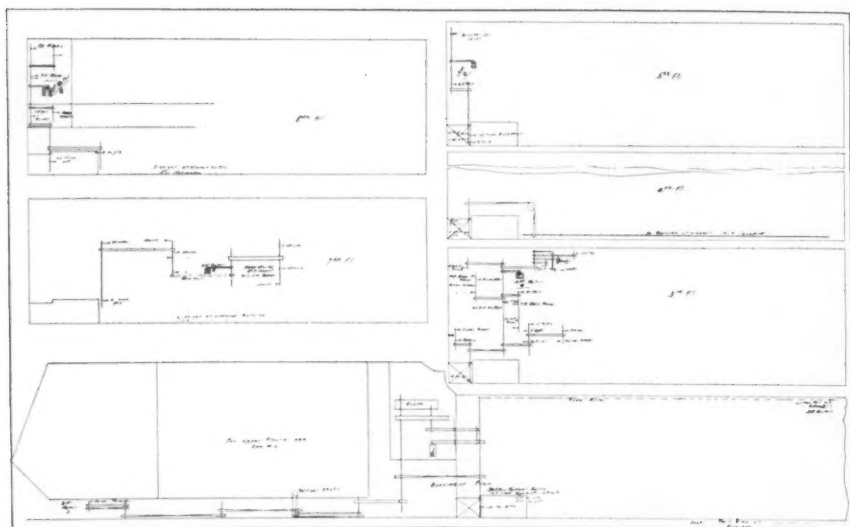
Estimate for Heating:

Labor, one man	\$832.00
Coal, 250 tons (inclusive of 50 tons for Live Steam use)	962.50
Ash Removal.....	85.00
Water Rent	10.00
Total.....	\$1,889.50

It will be necessary to install six motors, totaling 27 H. P., in the South Building, six motors, totaling 27 H. P., in the Main Building, a house pump direct connected to a 3 ¼ H. P. motor, an elevator pump with 30 H. P. electric motor and automatic control, a small steam boiler erected on the sixth floor for cooking and boiling purposes. This necessitates an investment of approximately \$4,500.00.

Investment Charge:

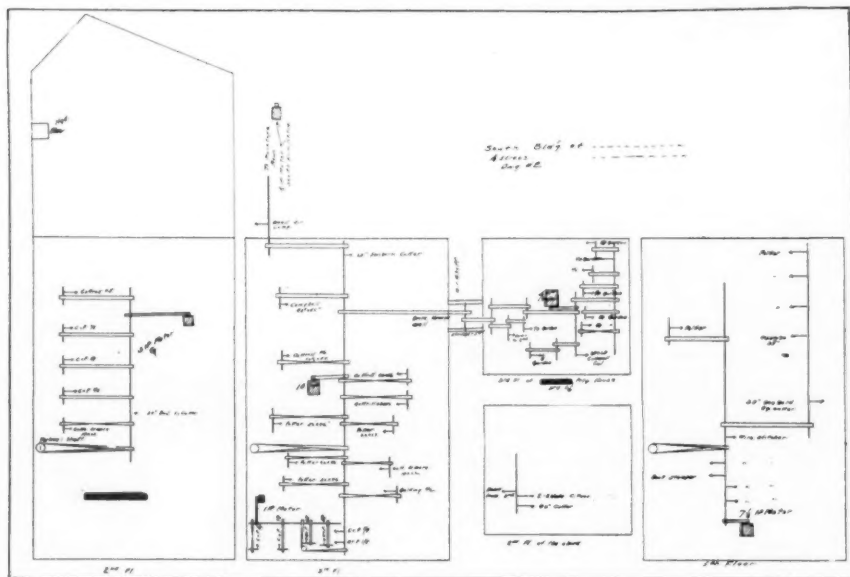
5% Interest on \$4,500.00.....	\$225.00
6% Depreciation	270.00
	\$495.00
Grand total.....	\$7,352.92
Saving over present operating cost.....	2,925.22
This represents a profit of 65% on the investment.	



Installation No. 1.—First Floor. Showing Method of Submitting Floor Plans Illustrating the Power Layout

When these figures are all compiled, we make our second call on the head of the establishment and go over them with him in detail. We show him conclusively how the saving is made. We talk rates last

or not at all, inasmuch as it is *total cost* that tells the tale finally. We simply guarantee to give him that amount of power for the stated sum of money. He will, of course, want some time for consideration and to



Installation No. 1.—Second Floor

verify the figures given us as to present cost, so we leave him in the firm conviction that the demonstration has been conclusive.

At the appointed time for the next visit, all our stock arguments for improved conditions are brought forward, if necessary, to convince him that the needed investment should be made, together with recommendations for the betterment of his local conditions. In this case, the following improvements were suggested:

1. Referring to drawing No. 1, basement plan. Practically all belting and shafting here are eliminated, and all this space made available for storage.

2. Anyone of the several groups may be operated at any time day or night, without previous arrangement with the engineer.

3. Elevators can be run overtime on rush shipments from stock without getting steam up.

4. All belts running in the elevator shaft from basement to 8th floor are eliminated with consequent reduction in repairs. Also the elevator need not be held up while repairs are being made.

5. On 7th floor, there are some hand operated machines, which were so installed to avoid running the engine, since they were frequently used at night. The labor item is here eliminated, and with the addition of a single belt they can be used at any time.

6. The live steam is all used on 7th and 8th floors; therefore instead of piping steam from the basement, a small water heater or boiler should be installed on 6th floor and saving the loss due to transmission in steam which only wastefully heats the lower floors (used for offices) in summer time.

In such a case as this, where both financially and mechanically electric drive offers unquestionable advantages, the closing of the contract for central station power requires only ordinary sales ability. But in every instance, unless from local conditions the electric motor is absolutely uneconomic, the careful preparation of a thorough logical written proposition is essential to the proper handling of the prospect.

A proposition involving a smaller installation we handled similarly, as shown below:—

Boilers:

PLANT EQUIPMENT.

One H. R. T. Boiler 35 H. P.

Engines:

One 9½ x 24 in. Slide Valve Engine 30 H. P.

Engine Test:

Average running load..... 12.54 H. P.

Friction..... 8.71 H. P.

Net work 3.83 H. P.

$12.54 \times 3060 = 38372$ H. P. or 28779 K.W. Hours.

Connected load..... 15 H. P.

Load factor..... 83%

No correction has been made on cards, due to reduced indicator piping, as particular care was exercised so as to keep all water from indicator.

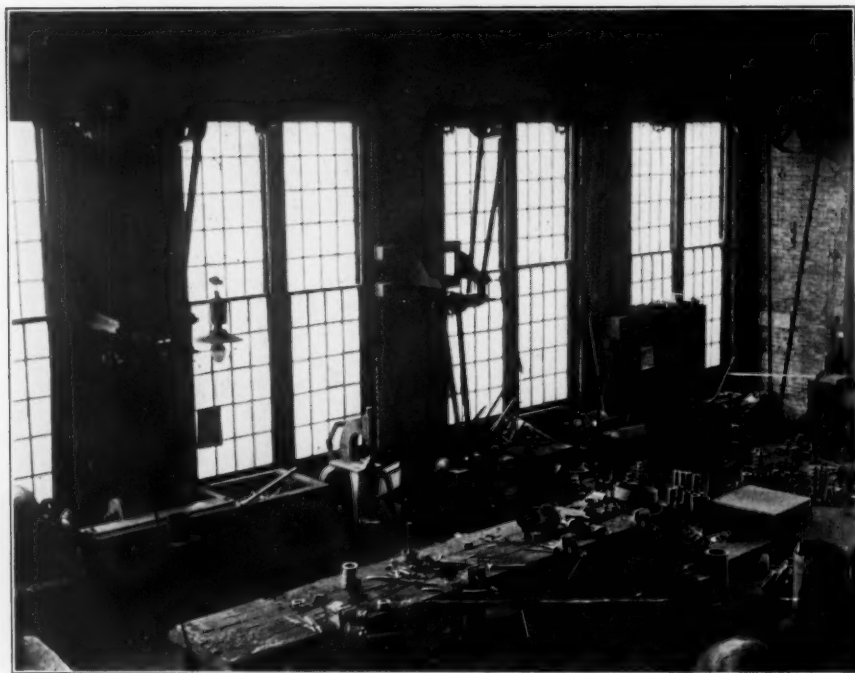
Present Operating Expenses:

One engineer.....	\$840.00
Coal, 221 tons @ \$3.75	828.75
Removal of ashes	30.00
Water rent	70.00
Oil and waste.....	30.00
Repairs, etc.....	75.00
Total.....	\$1,873.75

Heating and Labor Charges on Plant, if under Central Station Operation:

Labor, ½ one man's time for 5 months	\$175.00
Coal, 34 tons	119.00
Fixed charges on motor investment of \$500.00.....	55.00
Total	\$349.00
Net cost to compete per annum.....	\$1,524.75

Net cost to compete per K. W. hour, $\frac{1524.75}{28779} = 5.3$ cents.



Installation No. 2.—View of Machine Shop Showing Position of Motor

In this proposition it was found desirable to make a rate for comparison and we made our proposition on the basis of an 80% load factor on a 15 H.P. motor (the recommended installation) naming a

four cent rate, which is permissible at this load factor.

A saving of over \$370.00 is shown, representing 74% on the necessary investment and 20% on present operating expenses.

This case did not permit of any showing for saving in friction losses, or rearrangement of layout, so we looked around for other arguments. The business was subject at times to large rush orders which necessitated night work. At these times they were forced to hunt around for an extra engineer and pay him overtime rates, or the shop foreman himself acted as engineer, which naturally had a bad effect on the shop discipline. We showed

how overtime work was rather an advantage than otherwise, when using central station service, as it improved the load factor and the cost was never greater for this service. The point was also made more constant that they would secure a speed, independent of variations in load, and the deal was closed.

The photograph on previous page shows the corner where the motor was installed.

A Dollar Idea

By Eugene A. Creed, New Business Manager
The Auburn Light, Heat & Power Co., Auburn, N. Y.



SOLICITORS, commendably anxious to secure as large an amount of new business as is possible, very often sign contracts with prospective consumers whose homes are located a long distance from the Company's lines.

The Company finds it is impracticable to make the connection, and the solicitor is compelled to report to the prospect adversely, who as a rule feels injured and is somewhat prone to advise the Company that a contract was signed, and we must make good. To obviate this, we furnish our men with a blank card upon which is written, by the agent, name of prospect, distance from lines, prospective customers along the proposed extension and nature of business. The agent advises the prospect that a survey will be made and if the installation is practical same will be taken care of. If the report is adverse, there is no ill-feeling on the part of the prospect and the Company is not put in a wrong light.

The First Central Station Travelling Man

The Story of a Trip Among National Advertisers in the Interests of the
Denver Gas & Electric Company

By G. E. WILLIAMSON, SIGN SPECIALIST
DENVER GAS & ELECTRIC COMPANY, DENVER, COL.

THE Denver Gas and Electric Company under the guiding hand of Mr. Henry L. Doherty, has long been recognized as the mother company of New Business Departments, and new and original ideas in new business development. Therefore it is not strange that the first central station "traveling man" should hail from Denver.

The object of my trip was three-fold. The Illuminating Engineering Society was holding its annual convention in Philadelphia, attendance upon which was the primary reason for my taking the trip. Then the Denver company felt that a personal call upon each national advertiser with whom we had been in communication for some time relative to electric sign advertising in Denver, would do a great deal more good than circular or personal letters on the subject. Therefore, it was planned that I should take up this matter while in the city in which each prospect was located. Then again,

"Thoughts shut up, like flowers, need air"; and I felt that if I visited the large cities in the United States and saw what was being done in the way of electrical advertising it would make my work in Denver

more effective. I should say that the latter was worth more to me, perhaps, and has been productive of more direct results, than either of the former reasons for my trip.

I visited seven cities including Chicago, Philadelphia, Washington, Atlantic City, New York, Boston and Scranton. I called upon national advertisers in Chicago, Philadelphia, New York

and Boston, after having carried on a personal letter campaign from our office prior to starting on my trip. My last letter to them announced that I was going to make a personal call on them in a few days in the interest of electric sign advertising in Denver.

The first thing of interest to me was the fact that national advertisers with whom we had been laboring off and on for two or three years



G. E. Williamson

by means of circular and personal letter advertising, and from whom we had in many instances received not so much as a reply, without exception received me courteously, and very kindly gave me as much time as I desired. I found also that eastern manufacturers were very much interested in Denver. The National Democratic Convention which was held here in July, gave Denver some good advertising, and the good things that the papers from all over the country said about that western city, were still fresh in their minds. The fact that Denver was well known and well thought of by the eastern business man, always proved for me an "open sesame" to his private office.

After introducing myself, I always started right in to give my prospective customer our proposition as effectively as possible. I told him what kind of a city Denver is, the number of inhabitants and the kind of people we have. I told him what I really believe,—that the people of Denver have money and are willing to spend money for anything they desire, so that it behooves the advertiser to create that desire. I told him that Denver is prosperous, that it was effected but little by the panic, that it is the commercial center of the Rocky Mountain region, and the natural distributing point for this section of the country.

I told him that fifteen railroad lines come into Denver, and one hundred and twenty-six passenger trains, enter and depart from the Union Depot daily, which shows the great number of people that can

be reached by electric sign advertising in a prominent location.

Then besides this I dwelt on the great number of summer tourists, some from his home city, who would be favorably impressed upon seeing the evidence of their townsman's progressiveness. Again the fact that he was advertising with electric signs in other cities, year after year, was evidence that he knew electric advertising to be a good investment; and if it was a good thing in other cities, it was at least logical to assume that it would be a good thing in Denver, taking into consideration these facts. I also mentioned different national advertisers who were doing electrical advertising and this never failed to secure my prospective buyer's interested attention.

I took with me on my trip photographs of Denver's illuminated streets, and some of our best electric signs, which I found aided me greatly in backing up my claims regarding Denver. To close up my part of the proposition, I showed him that the Denver Gas & Electric Company's rates for current were low, and in some cases they were lower than the price he was paying in other cities for the same purpose.

Conservatively, I should say that there were only about three national advertisers whom I called upon that I was not able to interest in my proposition. One was a wholesale liquor dealer who was very much discouraged about the local option outlook; another was not interested in advertising in the west, because his goods were not being represented there; and the third was a Cereal Company which the high

price of grain had driven to economizing on expenses. There was a second class which thought very favorably of my proposition, but were waiting to see if the election went right before making any new advertising contracts. We are now making an effort to convince them that the election did go right. A third class not only showed interest, but started negotiations to put up signs in Denver and secured options on roof locations for them. The near future, according to the present outlook, will see four such signs burning in Denver, as a result of my trip.

Naturally our greatest disadvantage in securing this class of business is our distance from our prospects, making it impossible for us to call upon them often to press our claim. All in all, however, we feel that this phase of the trip was very much worth while. But the thing that proved of greatest value to me and possibly to the company, was the information I picked up regard-

ing new methods and ideas on electric sign and display lighting. As a direct result of these new ideas gained while I was "lookin' around", I have closed, personally, contracts for nine animated and spectacular electric signs, the yearly revenue from which would pay the entire expense of my trip ten times over. Besides this, it has supplied me with one of the most important requisites of the salesman—confidence. It was always embarrassing to me to have someone to whom I was trying to sell an electric display of some kind, refer to something he had seen in this line in some eastern city, while I was forced to admit that I had not seen it and was not up in my line.

I can approach my prospect now and tell him what is being done in other cities, and he in turn has more confidence in my ability and knowledge of my line. All in all, I shall never be able to estimate the value of the trip to me, and I am sure it has paid my company.

A Dollar Idea

By Louis A. Pettit, Jr.

The Middletown Lighting Company, Middletown, Ohio



WE have just succeeded in securing permission to remove the iron gratings from the coal holes in the sidewalks throughout the business section of the city, and in place of them will install glass covers with the company's name and a line of advertising painted on the under side. An incandescent lamp equipped with a flasher will be placed beneath and we believe the novelty of the scheme will create plenty of lasting publicity.

Experiences in Selling Irons and Seeing the Point

BY NELLIE NEVIN, HEATING DEPT.
EDISON ELECTRIC ILLUMINATING CO., BROOKLYN, N. Y.

ARE the "selling points" the only salient ones we see in this work of ours? Do we eliminate the lighter side and acknowledge only the stern realities of a situation, or do we try to see both sides at once, regretting our failures, rejoicing in our successes, and always enjoying the humor to be found in every situation? In this work of selling electricity the "iron" side of it is not consistently a smooth one; there are as many difficulties to be faced, as many obstacles to overcome and as many trying situations as there are bright cheery, easily won victories.

The experience in my work being both varied and interesting, the Editor of the Magazine does me the honor to believe I may be able to interest you for a few minutes and now I desire to take you into my confidence. He expressly says I may use about two thousand words, and I ask you, honestly, did you ever know, and do you believe the ever knew a woman who could ex-

press her opinions on any subject in a mere two thousand words? Does he consider me the "Unknown Quantity"—a woman of few words, or does he in consequence of a recent interview, hold up a warning finger in protection of his unsuspecting subscribers?

I do not believe, in a general way, that there is a more interesting side to central station work than the one which controls the Domestic Appliance Department, and while this statement is usually met with a lofty smile of derision from those working in power and illumination interests only, we, in bowing to their superior knowledge know that although this Domestic Department is but the infant of the central

station, it is a precocious one, and bound to some day be a credit to the family.

We have been particularly successful here in Brooklyn in our flat-iron campaigns, and generally find the customers' reception of our



Pressing His "Neckties"

demonstrators a most cordial one. Of course, there are many instances where it is impossible to gain entrance for various reasons, and as many where the exit is equally difficult, as we are forced to hear how Willie had the measles, while Jennie painfully and persistently practices her piano lesson, and the lady across the hall comes over to have her waist buttoned. She is going shopping, and you must see the lovely silk she is going to buy (she shows you a sample), and if you are dutifully attentive, maybe you sell an iron, and maybe you hear: "Well, you see, my dear, it is awfully sweet of you to call so many times, but, really, I haven't had time to try the iron,—you see, I'm so busy, and I have such difficulty with help I'm just distracted, and I really think you had better take it back" And should you chance to get within touching distance, it is in just such cases as this that the iron is found to be hot, the plug having been taken from the socket when your interview began.

I believe it utterly impossible to carry out any special line of selling talk other than the plain details of demonstration. In soliciting for orders in this work, every occasion demands a different way of handling, and the case in which we expect to get results fails, and the unexpected always happens. For instance, take the woman who, gorgeously gowned, majestically informs you that she never does any ironing,— "Why, I do not have any time; I have the Mothers' Meeting one day, a Whist Club the next, my

singing lesson for Thursday, and I always go to two matinees a week, and it is so very much cheaper to have the laundry done out than to be bothered with a maid, and really (as she vigorously pins on her hat), you must excuse me. Oh! Will you call again? Well, I cannot promise." You call on her at 10 a. m. Saturday, and in John's slippers and a pink kimono she is busily and merrily making the Saturday splash for a Sunday dash with the electric iron in full play, and *this lady buys* it. But there is the dear, tidy little soul who enthusiastically says she is almost sure she wants to keep the iron but must have just a few more days' trial to see if it is just the right size, etc. "Mr. Smith does want me to have it," she says; "he thinks it will be such a comfort in the summer." Of course, you leave the iron, and feeling pretty sure of this case, you call some afternoon on your way back to the office, and have the pleasure of hearing Mr. Smith growl out, "Tell her No! What do we want to fill the house with a lot of useless truck for?" and *this lady does not buy it*.

The brides and the bachelors, Lord bless 'em, furnish us no end of amusement. One of the former tearfully asked me the other day, "How many beans do you put in the percolator? Jack likes his coffee strong, and the last time I made it I put in seventeen cups of water (demi tasse size) and two teaspoons of coffee beans, and he actually swore, and wouldn't drink it, he was so cross," and in pity for poor Jack,

you leave a recipe for coffee (ground before using). The bachelor in the Apartment Hotel, he, "Oh, all he wants the iron for is to press his neckties; he really wouldn't need the thing, but the chap in the haberdasher's tells him its deuced handy for that sort of thing, and he tried it last Saturday afternoon on the table"; but before you leave he indirectly asks you what to ask for when you buy a long ironing board with the thick stuff on it like the tailors use, and does it hurt the iron to use it on a very wet cloth. Can't you picture him next Sunday morning putting beautiful creases in his — "neckties"?

I wish I could do justice to a dear little old lady in a trim silk gown, lace apron and dainty cap, to whom I sold an iron a few weeks ago. She had recently come from Germany to reside with her son, a young physician, and the stewardess on the steamer had loaned her an electric iron, the generous praise of which caused her son to purchase one for her. Her sweet, almost childish joy in possessing it, and her pride in the generosity of "My Boy", as she called him in her quaint pretty broken English, joyously and tear-

fully kissing the photograph of a big broad chap in a surgeon's white uniform and cap, spelled the word "Mother" in capital letters.

One of the most pathetic and, personally, interesting experiences I've had, was a recent visit to an apartment maintained by six dear old maids. Being a comfortable distance along on the road myself, this visit made a lasting impression on me. They were all gowned in joyous pinks and blues, and the one who did the talking for the rest confidentially told me that "the girls" (?) found the iron such a comfort for belts and ties and things that they had decided to each pay a part of the price and buy the iron; but, if I did not mind, Julia had just bought a new hat, and (this in a whisper) it was just a trifle too

youthful for her. Would I take the hat as part payment for the iron? I am still wondering, if I look utterly foolish, or old enough to wear Julia's hat, or both.

Have you ever noticed the very important looking gentleman who comes in to buy a curling iron heater, but who begins by looking at a cigar lighter (so you won't suspect him)? He very pleasantly tells



The Electric Ice Cracker

you that he didn't come in to buy, "just looking around, you know", but you can rest assured before he leaves that he is tired amusing the baby with "Milady" holding the iron in the gas flame, and he willingly pays the price.

Electric irons find many uses other than their intended ones in the homes supposed to be correctly equipped for housekeeping, as proven by a recent call by telephone to the effect that an iron was out of order. When I called, the lady insisted that the iron had worn out much too soon, but a hasty examination of the iron proved that it had been roughly handled. Of course, this was emphatically denied, and a refund demanded,—repair of the iron would not suffice. In justice to the iron, I requested to see the maid, and a shy, blue-eyed blonde girl came in answer to the bell. Hilda insisted that she had not injured the iron, but after much persuasion and the assurance that the price of the repair would not be deducted from her wages, she said as nearly as I can remember—"De only ting ay bane do is brak de ice,—ay find no pick here, and de iron got good sharp end. It brak ice fine for grape fruit

all in nice little pieces just so, but sie no more get hot, ay bane guess the ice get inside."

Poor Hilda, however, is no more amusing than the very intelligent lady who assures you that she knows enough already about the old iron (her husband is an electrician), and that the iron takes so many volts every watt, that she can feel the current in her arm all the time she is ironing, and anyway, she only used the iron once, and her bill was a dollar and sixty-five cents more than last month, and if she did buy one, why, Will is in the business and can get it cheaper. I say, "Good morning", and nobody envies Will. And so I might go on to the end of the book, but being forewarned is being forearmed, and I only ask you to agree with me that "The way of the Iron is hard, but agreeable", for though the work be tedious and the obstacles many, there is an unlimited source of amusement to be found in selling irons. I never attempt to use a set line of talk or say certain things to certain people, for a very little experience will teach you that "Words learned by rote a parrot may rehearse, but talking is not always to converse."



Installing Electric Heat in a Cold Storage Plant

BY E. F. MCCABE, GENERAL MANAGER
MIFFLIN COUNTY GAS & ELECTRIC CO., LEWISTON, PA.

A COUPLE of years ago while nosing about in an artificial ice and cold storage plant looking for some new way of selling juice, I noticed an employee carrying a piece of red hot iron on a scoop shovel which he had heated in one of the boilers. He opened a vault door, and carried it into the vault. My bump of inquisitiveness got the better of me, and I inquired the reason of this procedure, and was told that very frequently it was necessary to change the temperature of the storage vaults a degree or so, or to alter the "hygro-metric conditions" that is, the condition of the atmosphere. To do this, they carried in the piece of hot iron.

They also told me that several vaults contained eggs, beer, meat, fruit, etc., the required temperature of each vault carrying a degree or so from the others. To get the exact temperature required, and to give off no odor, or products of incomplete combustion that might contaminate the contents of the vaults was the problem. I immediately hunted up the manager and told him that his method of changing the temperature of vaults belonged to bygone ages, and that if he would give me an opportunity, I could demonstrate it. As a result of our conference, a small three heat electric radiator with a maximum capacity of 200 watts was

placed inside two of the vaults as an experiment.

I suggested to him that he make a small opening in the vault door and fit it with glass, and hang a thermometer and hygrometer inside of the vault which could be illuminated by the turning on of an electric light inside controlled by a switch from the outside. The amount of moisture in the atmosphere or the temperature of the vault could then be brought to the desired degree by a three heat switch, connected to the radiator and placed outside of the vault door. This would avoid the opening of the vault door, which they told me was objectionable on account of the foul odors entering the vault. After a short experience with my outfit, they found that it worked so satisfactorily that they have had electric radiators fitted up in the same manner placed in all the cold storage vaults that require a change of air conditions or a temperature slightly higher than that furnished by the artificial refrigeration.

This plant also ships eggs by freight in winter, using refrigerator cars for the purpose. They heat the car to a temperature of 60 degrees F. before closing the door, thus delivering the eggs a distance of 160 miles without freezing in the coldest weather. The various methods of heating the car that had been

tried were a steam coil, a coal stove and a gas stove. None of these methods was satisfactory, being either expensive, troublesome or taking up too much time and the coal and gas stoves both gave off fumes which were bad for the eggs.

I suggested that a 4 kilowatt capacity electric radiator would do the work, quickly, economically and conveniently. It was installed and used during the winter; the cold storage people being very much

pleased with the results. They also use this radiator in the room where the eggs are candled and packed preparatory to shipment. It was found convenient to have some heat in the room, so that the men could push the work along rapidly, and not have to leave it to go to the boiler room to get warm and perhaps take a smoke. The electric radiator is the only source of heat that can be used here and they found that it fills the bill exactly.

A Dollar Idea

By Geo. Pugh Smith, New Business Department
Scranton Electric Company, Scranton, Pa.



IN a great many cases complaints of poor light and high bills are due entirely to the large absorption of light in the walls and ceiling. In handling such a complaint, I use the different colored contract cards with which each representative is equipped, or a note book, white handkerchief, a black hat, a calendar, or in fact anything which will provide a variation of colors. The customer's attention is called to the fact that the lighter the color the brighter it shows under a lamp, and he is advised to repaint his walls where possible. A card or piece of paper is then held at an angle from his walls and again at an angle from one of the bright cards demonstrating that while the lighter colored card reflects light, the dark walls absorb it.

He is then shown that he can usually save the cost of his painting in doing away with the necessity for more light. I figure out for him the probable proportion of his light which he is losing and the saving that can be effected by the use of the proper reflectors and proper wall tints. This saving can be counted on to more than cover the cost of repainting the wall.

Our Business and Yours

The Contractor in a New Field

WE have all heard much conversation and read much printed matter on the subject of more co-ordination and greater active co-operation between the central station and the electrical contractor. In some cities clubs have been founded to promote a better understanding and the advisability of such a policy is receiving general recognition. Probably as yet, however, the concrete results are not large. In some few cities much good work has been effected, but it is an unfortunate fact that in the majority of cases the purely conversational stage is still to be passed.

As an evidence of what can be accomplished by a contractor in a big way, the story of the decorative street lighting system in Oakland, Cal., stands out as a beacon. In the paper presented before the Iowa State Convention by Mr. D. F. Fradette, Contract Agent, Des Moines Electric Company, Des Moines, Iowa, on the subject of "Ornamental Curb Line Illumination" some very interesting data is presented covering the methods applied and the results obtained in various Western cities. This paper appears in this issue of SELLING ELECTRICITY.

In most cases such special street lighting systems have been developed by Merchants' Associations, Boards of Trade and like organizations working in conjunction with the local central station. In Oakland, however, a contractor engineered the entire project. He canvassed the merchants and property owners, he worked up the organization, he carried on the necessary negotiations with city and central station and finally he installed the equipment. It was good business for him, but it was better business for the lighting company as we all know.

Now, there are a hundred cities where there are electrical contractors just as able and energetic as this man in Oakland, if the same ability and energy be but awakened and properly directed. Not that any central station should expect or allow a contractor to assume the full burden of such a movement unaided, for in mere justice and the proper protection of its own best interests the central station should participate. But here is an opportunity in every city and here are the agents ready at hand and able.

The contractor can sometimes get in more intimate accord with the man behind the store front than can

the representative of the company. Why should you not use him to your mutual benefit in the development of special street lighting systems?

Have you tried in the *right way*?



The Function of a Trade Paper

THE following paragraphs appeared editorially in a recent issue of *Colliers*:

"A new concept of the proper function of the trade press is making itself felt. . . . The new order of trade paper does its duty by the reader whether the advertiser likes it or not. If the advertiser tries to exert his moral influence by canceling his advertisement, the publication has an opportunity to win the advertiser's respect by refusing his terms, and if the advertisement does not come back of its own accord later on, it affords an opportunity to consider whether it is really desired.

"It should ever come to be generally suspicioned that a trade paper framed its editorial policy to please its advertisers at its readers' expense, the prosperity of that paper would tend to wane. A publication that is not what it purports to be, purports to be what it is not. Reading matter that purports to be written to enlighten the reader, and yet withholds known information that would be of use to him, or colors information that is given, because such methods suit the purpose of some advertiser, is just the kind of read-

ing matter that reader stands least in need of. . . . The right basis of a trade paper is to serve the reader with reliable information and incidentally to sell advertising space. The trade press must eventually gravitate toward that basis. Happy the man who moves with the current, when the current is running in the right direction."

We might add that such a policy of common sense justice is quite as essential to a safe-guarding of the interests of the advertisers as it is to the proper serving of the readers.

A trade paper's value to its advertisers, lies wholly in its known value to its readers and an advertisement that does not reach confident and approving readers is waste space. We believe that we can serve our advertisers only through keeping absolute faith with our readers.

SELLING ELECTRICITY is of this "new order of trade papers."



An Altoona Editorial

THE *Altoona Mirror* printed an editorial one day last month entitled "Encourage Employees to Think." This much of it will interest you:—

"Mr. E. B. Green, Superintendent of the Edison Electric Illuminating Company is a dreamer. But do not get from that word the impression that he is a dreamer of the impractical sort. He dreams of big undertakings in the electrical world—in his especial world of work.

"It is the dreamers like Mr. Greene who achieve. Years ago, when the Edison plant was a little one-horse affair, he could close his eyes and look into the future and see it a mammoth establishment.

"Years ago, too, he dreamt that the best way to develop an esprit du corps was to assemble the employees, all of them, from the superintendent down to the man who wheels out the ashes, every once in a while, and talk shop.

"This is organization. Organization has two objects—betterment and saving.

"But Mr. Green kept talking about his proposition until there came a time when it entered a listening ear.

"Now the men at the Edison plant hold regular meetings to talk over matters of mutual interest. The last one was held on Wednesday evening of this week. Fourteen men and two girls attended, including the superintendent, chief engineer, heads of departments and minor workmen.

"The subject under discussion was 'Opportunity'—a big broad healthy subject, interposed, no doubt, for variety.

"The details of that meeting it is not necessary to mention.

"The thing we wish to call attention to is this announcement:

"The Edison company will pay to any employee the sum of \$5 for each and every suggestion that is adopted for the improvement of present practices.'

"That offer spells encouragement in capital letters. It is broad enough to include every person on the company's pay rolls. It is a standing invitation to them to do their very best; an incentive to think for themselves and for the company."

Above this editorial appears the *Mirror's* sworn statement that its average daily circulation during March was 12,626. Now read the editorial again. — — — Do you see what it means to the Altoona Edison Company?

"But" you say, "The editor is probably a friend of Greene's, so it's easy."

Well, suppose he is? You have plenty of friends yourself. Is your editor one of them? If he is he will do as much for you any time and you do not have to call him by his first name or have his family in to Sunday dinner either?

We know of several companies that have made the same offer to employees that Mr. Greene has, but we doubt if it has been advertised to 12,626 thinking readers.

Are you working for your local press?

Is your local press working for you?

Are the editors your friends?

The papers want honest news, and you want honest publicity. It is a fair swap.

Know your editors and give them news and they will do as much for you as they will for Greene of Altoona.



News and Reviews

Electric Brass Cleaning

The Stow Electric Company of Binghamton, N. Y., is manufacturing an electric buffing device for polishing brass work such as brass signs, door knobs, push buttons and the like. The polishing of brass is a bit of household drudgery which is still done in the old way. The Stow apparatus can be handled by the central station to advantage.

Holophane Company Moves

The general offices of the Holophane Company formerly in New York City, have been moved to Newark, Ohio, where the Holophane glass is made. All branch offices will continue as before, but the general business of the company will hereafter be centered at the plant.

Electric Welding

Electric welding is being largely used in the manufacture of chains, the electric machine being able to weld from four to five hundred links per hour for small chains, formerly done at the rate of twenty per hour by hand. Iron to be welded electrically must be free from phosphorus and silica and contain manganese.—*Jrl. of Elec. Pwr. & Gas.*

Jovian Lunch Clubs

The newest Jovian Lunch Club has been organized by the Sons of Jove in Philadelphia, through the efforts of Mr. J. A. Vaughan, Pennsylvania statesman. The club meets on every Thursday from 12 to 2 o'clock, and any man in the electrical field who may be in Philadelphia is welcome at the headquarters in the Continental Hotel.

Similar lunch clubs are already flourishing in Buffalo, Rochester and Los Angeles.

Proposed Street Arches in Three Cities

An association has been formed by the Merchants on Columbia Street, Fort Wayne, Indiana for the purpose of working up a special system of street illumination for that section. A committee

is now at work, and arches will be installed in the near future.

In Grand Rapids, Michigan, a further extension of the street arch system movement is also being put into effect, and it is reported that a similar movement is underway in Worcester, Mass.

Sorting Cigars by Tungsten Light

A new use for the tungsten incandescent lamp is pointed out in the daily newspaper advertisements of the Commonwealth Edison Company, of Chicago. It takes keen eyesight to sort cigars at the factory into "dark," "medium" and "light," and hitherto, it is said, this work has been possible only by daylight. Recently sorting by the light of tungsten lamps has been tried, and it is declared that the experiment was entirely successful, thus demonstrating the color value of the light from tungsten lamps.—*Electrical World.*

Signs for Everybody's

That "Everybody's Magazine", that stronghold of magazine advertising, is a firm believer in electric signs is evident from the fact that the publishers have put out over two thousand small flashing signs during the past year. These signs are made with a cloth face in a green wood frame 19½ by 12 inches. The face is printed in red, black and green on white cloth and presents a brilliant appearance even when the light is off. The signs are run by a small flasher and are loaned to such newsdealers as have electricity in their news stands.

Long Island City Changes

Mr. J. W. Rutherford has left the New York and Queens Electric Light and Power Company and has accepted a position as power solicitor for the Consolidated Light, Power and Ice Company of Joplin, Mo.

Mr. Harry C. Alvord, formerly power man with the Brooklyn Edison Company, is filling Mr. Rutherford's place with the N. Y. & Q. E. L. & P. Co.

The New York and Queens Electric Light and Power Company has moved its Jamaica office from 356 Fulton Street to a more spacious quarters at No. 4 Heriman Avenue. This branch has recently installed power in Schimmel's Dairy in Maspeth, L. I. This is a "sanitary" dairy in which the cows are now milked by motor driven milking machines.

The Electric Chicken-Picker

One more application of electricity is reported in the *Journal of Electricity, Power and Gas*.

Electric fans for picking chickens has been devised for wholesale poultry dealers. It is stated that all the feathers and down are removed in a few seconds by placing the dead chickens into a receptacle equipped with a powerful electric blower.

Philadelphia Man to Attend London Congress

The Philadelphia Electric Company will be represented at the Seventh International Congress of Applied Electricity, by one of its District Managers, Mr. Charles J. Russell, who is a Member of the Congress. The Congress will be held in London, May 25 to June 2, and after the adjournment Mr. Russell will visit various plants in England, France, Germany and Switzerland, investigating the various industrial applications of electricity, with especial regard to electro-chemical and electro-metallurgical processes.

No German Central Stations

The *Cleveland Plaindealer* printed this news note on April 30th:

The German government has offered a substantial prize for an effective method of combating the injurious effects of factory gases upon vegetation.

Surely the answer is: Use central station power! Are there none such in Germany ready to provide the remedy?

Lockport Heating

The Lockport Light, Heat & Power Co., Lockport, N. Y., is making great progress in the development of steam heating business. At present there are some 500 buildings on the steam mains.

Harmony in Scranton

Superintendent L. H. Conklin and New Business Manager Duncan T. Campbell of the Scranton Electric Co., entertained the electrical contractors of that city at a banquet on April 21st. A movement is on foot to organize the Scranton contractors as a branch of the National Electrical Contractors Association. The Scranton Electric Co. is doing all in its power to further the matter in the interests of broader methods and co-operation, not only between the several contractors but between the contractors and the central stations.

Brockton Edison Company Moves

The Edison Electric Illuminating Co. of Brockton, Mass., has moved its offices to new and larger quarters located at 42 Main Street, in the City Theatre Building. A large store has been fitted up and equipped for offices, demonstration and reception rooms and ample facilities are provided for displaying and operating appliances of every description. A photograph of the new office appears on page 220 in this issue of SELLING ELECTRICITY.

Hurley Machine Company in Larger Quarters

The Hurley Machine Co., manufacturers of the "Thor Electric" washing machines have been forced to hunt larger quarters.

On May 1st the plant was moved to the Hotz & Rehm Building, corner Clinton and Monroe Streets, Chicago. A large and beautifully equipped show room has been fitted up for demonstrating washing machines, ironing machines, dryers and other laundry appliances.

Electric Advertising for a Steamer

The new lake steamer *United States*, which has just gone into commission for service on Lake Michigan is to be the best self-advertised steamer afloat and it will be electric-advertising.

Residents along the lake shore will be afforded a marvelous sight this summer as this new vessel proceeds along its way. In addition to the regular lighting, it bears an immense shield decorated with red, white and blue lamps; a large skeleton star outlined with electric lights

and a huge double face electric sign reading "United States." This sign will flash the name of the vessel first on one side and then on the other. The crowning feature of this superbly illuminated steamer is an Old Glory flag erected on the stern. It is constructed entirely of metal and is studded with red, white and blue electric lights which are arranged with a flasher giving the effect of a waving flag. To see the Stars and Stripes waving at night miles out on the lake will be to say the least, an unusual sight. The flag, star, name-sign and shield are connected with festoons in the three colors extending from the masts. All of the electrical features were manufactured in the shops of the Federal Electric Company, Chicago.

Electric Advertising for Another City

Close on the heels of the Easton, Pa., "slogan sign" comes the announcement of another similar sign to be erected at Wooster, Ohio. This sign will be erected facing the railroad to advertise the city of Wooster to the travelling public. The Wooster Electric Co. will furnish the current free of charge.

Minneapolis News

In *The Stone & Webster Public Service Journal* for May is the following news from the Minneapolis General Electric Co.:

Of late an especially strong effort has been made to gain assurance that every new home and building built will be wired for electric lighting. When the building permits are issued at the city hall, this company secures a copy of the list of prospective builders, and immediately sends out a circular letter suggesting that proper provision be made for lighting circuits, switches, etc., and offers the services of its experts free in attaining the desired results. This letter is then followed by a map showing the location of our lines and by a set of drawings of three average homes showing the best arrangements of lighting and the most desirable positions for switches. The wiring, switches, outlets, etc., are drawn in red on these maps and the gas piping and fixture arrangements in black.

A business-getting idea that from a central station point of view and from the customer's viewpoint has proved of considerable interest, is the renting to customers upon our lines of electric vacuum cleaners at the rate of \$2.00 for the first day's use and \$1.00 for each succeeding day. This rate includes delivery of machine at the house and the services of instructor. The housewife does the work herself. The rental of the machines and the consumption of current are only a small portion of the benefit which this company expects to derive; one of the greatest gains is the desire of non-users of electric current to connect up in order to receive the advantages of the many labor and time-saving devices offered for use on our lines.

Mr. H. J. Gille, contract agent of this company, has recently returned from an extended trip through the South, visiting many of the Stone & Webster companies in the interest of the commercial departments.

WANTED — Live, Experienced, New Business Manager for New England Company to take charge in branch city of 15,000. Also experienced solicitor for same territory, to handle residence and commercial business. Address "NEW ENGLAND," care Selling Electricity.

AN EXPERIENCED CONTRACT AGENT desires a position as New Business Manager or Local Manager for an Electric Light Company. Can show record in developing commercial lighting and is anxious for an opportunity to produce. Address "CONTRACTS," care Selling Electricity.

WANTED — Solicitors in every city to sell A. & W. Electric Signs. It will pay you and your employer to co-operate. Write for information. THE A. & W. ELECTRIC SIGN CO., Cleveland, Ohio.

ELECTRICAL ENGINEER, College man, 27 years old, now in charge of central station commercial department in Pennsylvania, would like to change. Competent to organize new business department or build up power business. Successful record and references. Address RECORD, care Selling Electricity.

WANTED — Experienced man to solicit electric light and water customers. Address as below, stating experience and if salary or commission basis desired. THE MASSENA ELECTRIC LIGHT & POWER CO., Massena, N. Y.

WANTED — Electric Solicitor in district of 25,000 population, 125 miles from New York City. Excellent proposition for a hustler and employment for a good period. Address "V.," care Selling Electricity.

GAS AND ELECTRIC SOLICITOR WANTED — Some one to secure new business in appliances and lighting. New field and attractive proposition. New England location. Address "C. V. R.," care Selling Electricity.

Let Your Own Wife Test It



The surest and
quickest way for
you, Mr. Central
Station Man, to
learn the merits of
the

See our
Demonstration
in Booth
at
N. E. L. A.
CONVENTION

HOOVER ELECTRIC SUCTION SWEEPER

is to try it out in your own home. Let
your wife and friends test it thoroughly.
We'll abide by their verdict.

THE HOOVER ELECTRIC SUCTION SWEEPER CO.

Factory and General Offices :
NEW BERLIN, OHIO

Our literature contains some interesting information. You should have it on file

In writing to advertisers, mention "Selling Electricity."

A READY-MADE OPPORTUNITY

For expanding Central Stations to secure suitable Tungsten Fixtures for the growing demands of Interior and Exterior Lighting.

Our *New Tungsten Bulletin* will furnish you a most direct and convincing argument.

IT WILL GROW UPON YOU



Cat. No. 774

There is satisfaction in satisfying.

In our *New Tungsten Bulletin*, dated June 1st, we have assembled one of the most complete, useful, and commercially attractive lines of Tungsten Fixtures which have as yet been brought together between two covers. You should have it on file.

Write for our *New Tungsten Bulletin No. 4*, dated June 1st

Benjamin Electric Mfg. Company

New York

Chicago

San Francisco

42 West Jackson Blvd.

THE merits of Electric Advertising must be argued from the particular point of view of each class of prospect. When you sell electric signs to the banker, your sales talk is not the same that would appeal to the harberdasher.

¶ We are publishing in *SELLING ELECTRICITY* a series of articles by Mr. Earl E. Whitehorne, which are designed to aid the central station commercial man in converting doubtful prospects. They are well studied, specific arguments in favor of electrical advertising as applied to different classes of business, and are illustrated with photographs of actual signs in use under similar conditions.

¶ In the February number "Brightening the Bank" treated the sign proposition from the banker's standpoint. In the April issue "Light and the Church" presented sound practical proof of the value to churches of dignified outdoor electrical display. In July will appear a similar argument in defence of electric signs for newspaper offices. Each time there are numerous photographs as evidence and proof.

¶ We are printing these articles in pamphlet form and will be glad to furnish them to central stations for distribution among their local prospects, but to be followed up with direct personal solicitation. A good many copies of the magazine containing the bank-sign argument were sent out in this way and we have already been advised of seven signs which have been sold as a result.

¶ We will supply these folders at a low figure based on quantity.

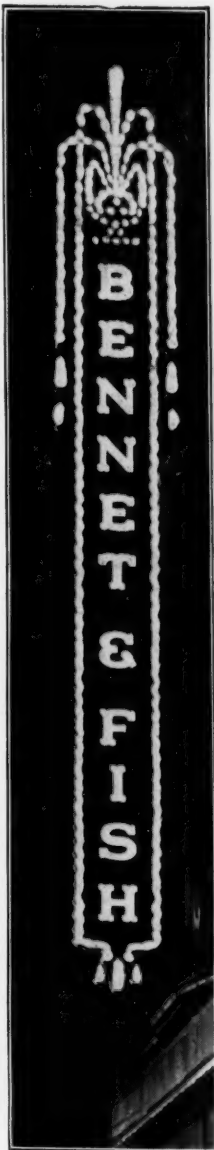
In writing to advertisers, mention "Selling Electricity."

The A. & W. Electric Sign Co.

Toronto

CLEVELAND

New York



**The Central Station:
The Business Solicitor:
The Merchant:**

**Make it your business to get business and
business will come.**

A. & W. ELECTRIC SIGNS

Appeal to the real live ones because they are business getters for modern merchants and business boomers for modern stations.

Many new and novel exclusive designed signs have recently been constructed which are only possible by the use of the new A. & W. flashing device. The accompanying cut of sign when in operation is a reproduction of a water fountain by electric bulbs. The bowl of fountain is produced by ruby lamps, the streams and drips by white lamps, and when in operation is a perfect reproduction of flowing water. Since January 1, 1909, five of these fountain signs have been installed, one in Cleveland, Rochester, Youngstown, Pittsburg and Erie.

Many new moving attractions have been installed by the A. & W. Company recently, such as moving automobiles, diving girls, waving flags, large steamboats in motion, sail ships on water, revolving balls, etc.

Send for Special Designs and Catalogue.

The A. & W. Electric Sign Co.

The Largest Electric Sign Works in the World

CLEVELAND, OHIO

**TORONTO, ONT.
64-72 Farley Ave.**

**NEW YORK CITY
1370 Broadway**



GEORGE B. SPENCER

Advertising
and
Sales Counsel

Suite 500
42 East 23rd Street
New York City

Consultation—by letter, or appointment, only

A Popular Billiard Hall is a Profitable Customer

It's a short-sighted policy, as all progressive sellers of electricity know, to install an inefficient or wasteful system of lighting which only burns a short time each day when an economical and efficient system would burn twice as many hours.

THAT'S THE "WHY" OF THE BISSELL BILLIARD FIXTURE

Economical and popular : up and out of the way : gives just enough light, properly distributed. No shadows—no bright spots on the table—no dingy corners—no glare in the players' eyes—just clear, soft, even, well-diffused light—and twice as much for the money as the ordinary outfit gives. And it costs no more than the cheap makeshifts you generally see. Make profitable and satisfied customers of the billiard rooms in your city by giving them good light and cheap light.

Write for descriptive circular. You need it.

F. BISSELL COMPANY, Toledo, Ohio

In writing to advertisers, mention "Selling Electricity."

Pump Pointers

Let us tell you how and where to sell electricity for pumping. There's profit in it if you go after it right.

Remember, it is power load at lighting rates.



"Sanitary" Pumps are low in first cost and economical in operation. They give continuous satisfaction, and require practically no attention. "Sanitary" Pumps meet every requirement for domestic water supply, and all types can be electrically driven. Get our data and prices. They will help you close a contract some day.

Manufactured by the

SANITARY PUMP CO.

12 South Canal, Dayton, Ohio

Manufacturers of Single and Duplex Double Acting Pumps, Deep Well Heads, Rotary Pumps

In writing to advertisers, mention "Selling Electricity."

Wagner Electric

Manufacturing Company, St. Louis, Mo.

Wagner Single-Phase Motor

in Elevator
Service



The Wagner Company
was the Pioneer

in the development of the commercially successful motor of the single-phase type. For many years it was practically the sole manufacturers of this type and is today the recognized leader in the single-phase field.

Central Stations need have no fear in adopting single-phase distribution on account of possible elevator requirements. They can be taken care of in a manner entirely satisfactory as illustrated.

Polyphase Generation with Single-Phase Distribution

has become to be recognized as modern practice. An alternating current single-phase and polyphase motor specialists, we invite correspondence. Please address the nearest office.

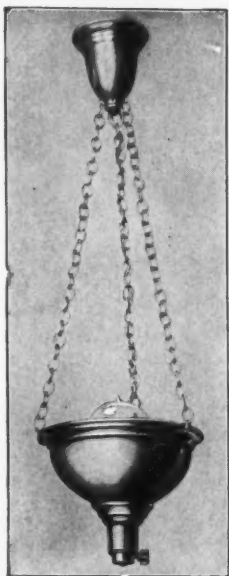
Wagner, Quality

Atlanta, Empire Bldg.	Montreal, Bell Telephone Bldg.
Boston, 110 State St.	New York, 50 Church St.
Charlotte, N. C., Trust Bldg.	Philadelphia, Real Estate Trust Bldg.
Chicago, Marquette Bldg.	Pittsburg, Lewis Block.
Cincinnati, First Nat'l Bank Bldg.	Portland, McKay Bldg.
Cleveland, New England Bldg.	St. Louis, 6400 Plymouth Ave.
Denver, 1621 17th St.	San Francisco, Balboa Bldg.
Kansas City, 815 East 12th St.	Seattle, Pacific Block.
Los Angeles, 326 S. Los Angeles St.	Sioux City, 515-517 5th St.
Minneapolis, Security Bank Bldg.	

Eye Comfort

The best and most scientific method of lighting is the Eye-Comfort System of

Indirect Illumination



Patents applied for

Neutralize the reductions in your bills caused by the use of tungsten lamps, by introducing the Eye-Comfort System. Requires approximately the same consumption of current in tungsten lamps as the old system used in carbon lamps, but gives your customer

**Better
More Scientific
and
More Satisfactory
Lighting**

A sample unit proves all our claims. Buy one and hang it in your home — you'll be an Eye-Comfort enthusiast in five minutes.

Bulletin Tells Why. Write Today

NATIONAL X-RAY REFLECTOR COMPANY

Offices and Display Rooms
241 E. Jackson Blvd.
Chicago, Ill.

BUY BUCKEYE TUNGSTENS *Now* B-E-C-A-U-S-E

Buckeye Tungstens are skillfully, carefully and honestly made.

Buckeye Tungstens are long of life and constant in service.

Buckeye Tungstens are carried in stock at all of branch offices and agencies.

BUCKEYE ELECTRIC CO.
CLEVELAND, OHIO

Flashing and Steady Burning ELECTRIC DISPLAY SIGNS

Are Our Specialty



If you are after something original along these lines consult us. We assist Central Stations in selling Electric Signs.

Haller Sign Works (Inc.)

319 South Clinton Street
CHICAGO

Quality not Price the Best Argument

If mere cheapness were the main consideration in lighting, there would be no electric light. There are many illuminants cheaper than electricity, but none so good. Similarly there are many fixtures cheaper than

Enos Tungsten Fixtures



but none so harmonious in design, none so conscientiously made, none so carefully calculated to give exact illuminating results. In addition to these qualities

Enos Tungsten Fixtures are Moderate in Price

Central Station Managers, Contract Agents and Solicitors will find that ALL of their better class customers will welcome them.

Carry Our Catalogue With You When Next
You Call Upon a Particular Customer

The Enos Company
NEW YORK

Write for Catalogue No. 10



Start the first step right

A customer can be discouraged very quickly in the beginning if anything goes wrong.

The best way is to see that they are furnished with the best.



means:

reliability and satisfaction, from the start. The Simplex Electric Heating devices have stood the test....the customers' test....and are acknowledged the standard.

Simplex Irons are business getters because they please Highest finish most efficient Simplex Quality

SIMPLEX ELECTRIC HEATING CO.

Cambridge, Mass.

Monadnock Block, Chicago
612 Howard St., San Francisco

A New Lamp



will be introduced at
N. E. L. A. Convention
Atlantic City
Booth 19

STAR FLAME LAMP
74 Cortlandt St.
New York

N. B.—A Bulletin for those who don't attend
the Convention Write

